CALIFORNIA
OIL WORLD
and Petroleum Industry

THE AUTHORITY ON THE CALIFORNIA OIL INDUSTRY

SECOND ISSUE
JANUARY 1941
VOL. 34 NO. 2
WHOLE NO. 1577

IN THIS ISSUE

Year 1941 Opens with Bright Outlook..... 3

Shallow Producing Areas Drilled Horizontally.....14

Laugh This Off.....18

Los Angeles Basin Development.....19

San Joaquin Valley Development.....21

Coastal District Development.....25

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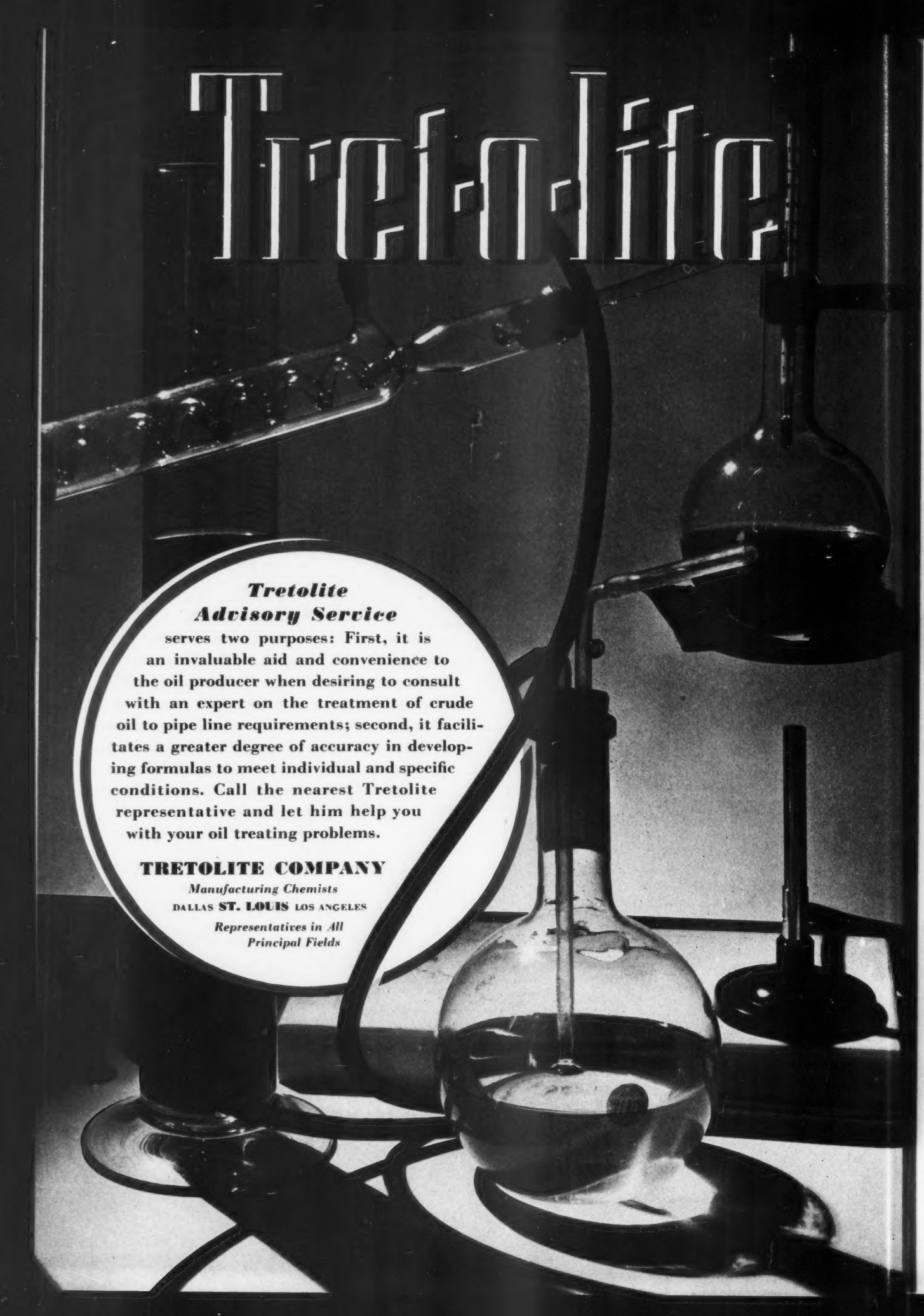
California Oil World and Petroleum Industry is published twice a month at 828 Petroleum Bldg., 714 West Olympic Blvd., Los Angeles, California. Entered as Second-class Matter January 1, 1937, at the post office at Los Angeles, California, under the Act of March 3, 1879. Subscription price: $1 per year in U. S. and Possessions, $2 in foreign countries, including Canada. Member of the Audit Bureau of Circulations.

January 28, 1941

Telephone Number RIchmond 2136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Year of 1941 Opens With Bright Outlook

Foresee Era of Discovery

With 1940 written into the record as a year of development with but few events of importance, the stage was set for a new era of discovery and already many signs point to 1941 as an outstanding year in the annals of California oil exploration. Though the indications are general throughout the state, chief interest, particularly of independent operators, is now centered in the Los Angeles area where more things seem about to break than at any time in more than a decade.

Castaic Area

Enthusiasm has reached a high point in the Castaic area where Western Gulf Oil Co. appears to have discovered a new shallow field about four miles northwest of Del Valle, the finding of which was the only major result of exploration during 1940. Located in sec. 31,5-17, the company's Lechler No. 1 entered Modelo oil sands at 2358 ft. which continued with streaks of shale to near the 2442 ft. bottom which looked possibly wet. A plug was placed at 2415 ft., 8⅝ in. casing cemented at 2296 ft. and a pre-gravel-packed perforated liner run for the production test which is in progress at this writing. Formation tests are the basis for the prediction that production will be about 100 bbls. a day of 24 gravity oil, though actual results may be considerably higher or lower.

If Western Gulf is successful in obtaining commercial production, it will be a perfect score for the last two wildcats drilled in Los Angeles County north of the Santa Clara River, a notable achievement in any league.

Indicative of the interest of important companies in the Castaic region are the bids received by the County of Los Angeles on its 2400 acre jail farm which borders the

For two weeks roughnecks on the Federal deep test at Inglewood spent most of their time conditioning mud. Returns were as light as 50 pounds per cu. ft., and on several occasions a blowout was narrowly averted. From left to right these busy men are: J. Gans, I. Brown, E. Garrison and G. Wingfield.

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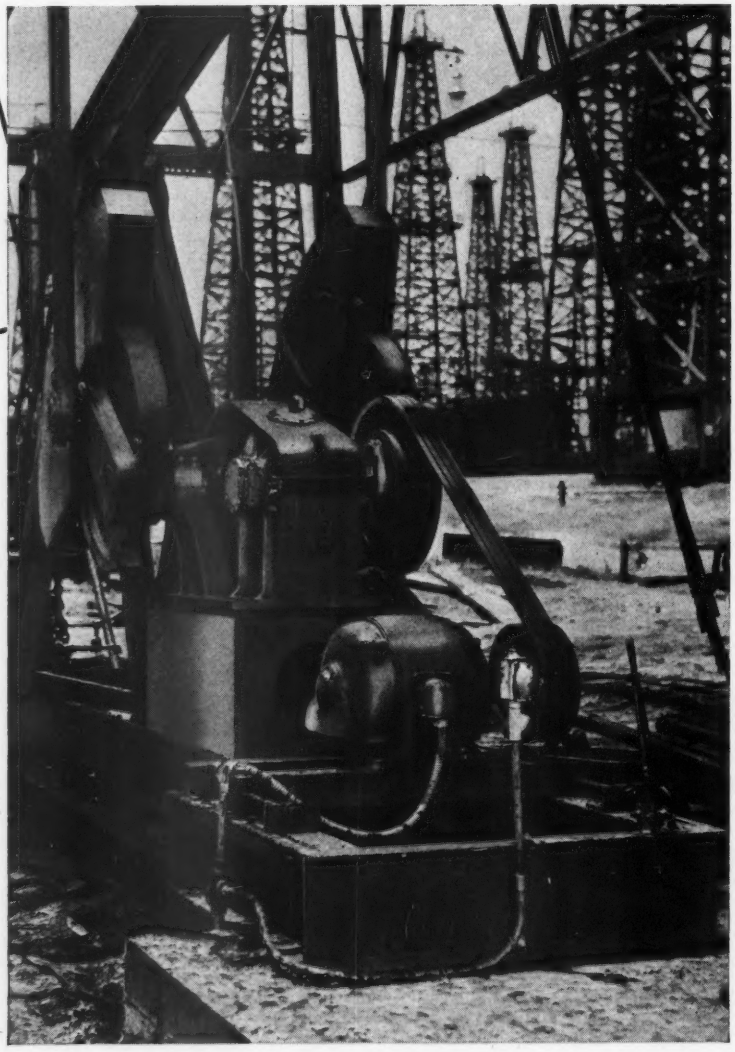

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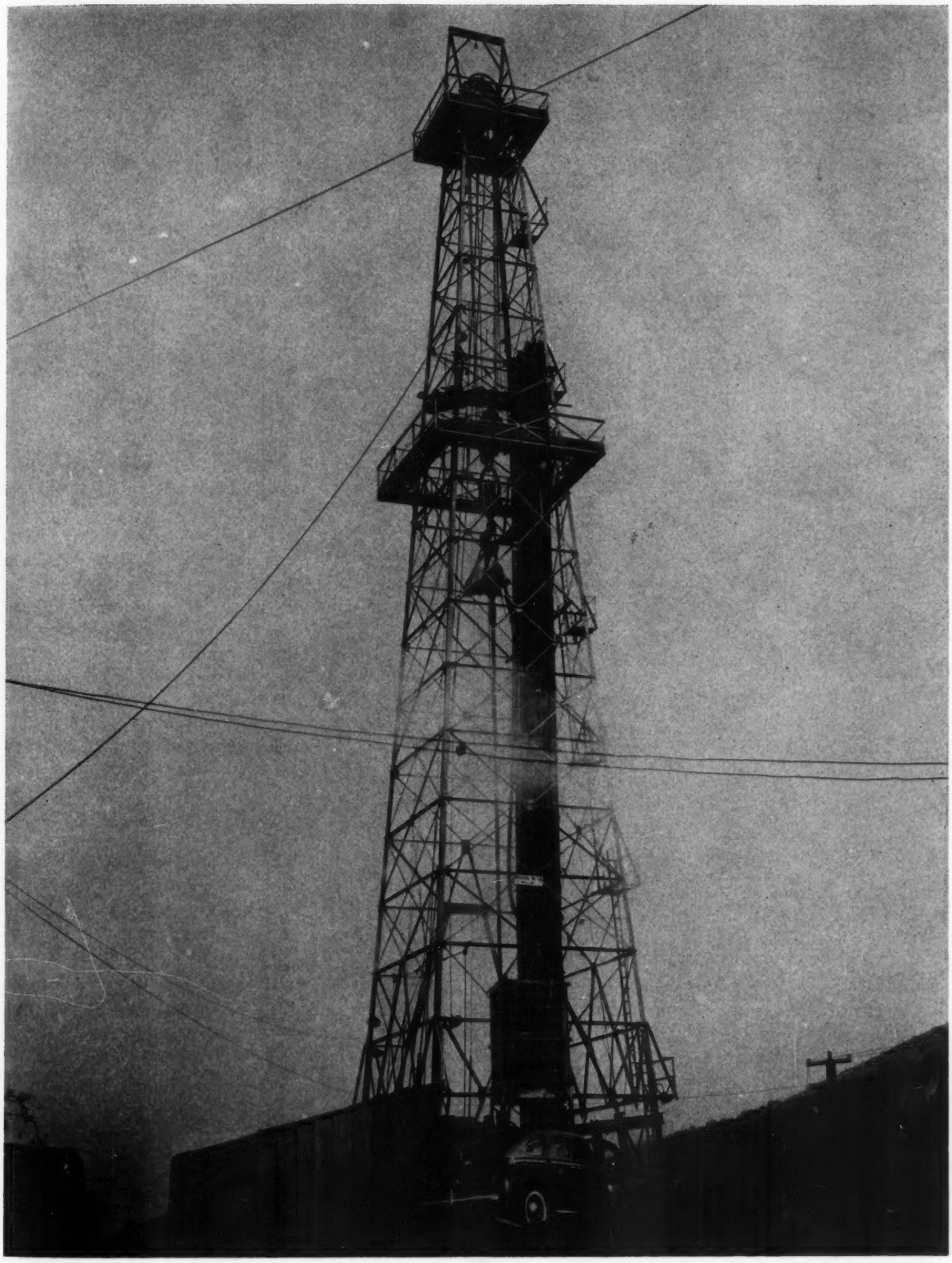


Federal Oil Co.'s Smith No. 1, at Inglewood, deepened by R. R. Bush Oil Co. to 7994 ft., is preparing to test an extremely high pressure gas and oil zone topped at 7920 ft.

Much difficulty was experienced by R. R. Bush Oil Co. in pulling drill pipe from the Federal well due to gas lightening the circulating fluid.

Ridge Route just north of the Beacon. Highest offer was from Barnsdall Oil Co. which provided for a $50,000 cash bonus plus high bonuses from oil and a 25% royalty. Drilling must be started within 90 days of signing of the lease which was scheduled for January 28.

The entire country from the Temescal Ranch to Bouquet Canyon is being thoroughly re-worked by geologists and leasemen and several new wildcat locations are expected to be announced shortly.

Inglewood

Most interesting project in the Los Angeles Basin proper is the Federal Oil Co. well at the north end of the Inglewood field which is being deepened by R. R. Bush Oil Co. After sidetracking the fish on the old bottom of 7880 ft., the well deepened to 7994 ft. encountering dangerous gas pressures below 7950 ft. which made it all but impossible to pull the drill pipe from the hole. An electric log was run, however, which indicated the top of the deep Miocene zone to be at 7920 ft. where 7 in. casing is standing cemented. Much more oil and gas are in evidence than showed on the ditch in the first Bush deep well on the west flank of the field which was completed as a small producer.

Although exact correlations are not at this time available, the Federal project appears to be at least 300 ft. higher on the zone than its predecessor and to have a much greater amount of kick. Tentative plans of the operators call for a formation test after the hole has been cased and before deepening to determine the extent of the horizon. Should this test indicate that big production is possible, a wide area north of the present field and extending into the subdivided portion of Culver City will be considered as potentially oil bearing. Faith of the R. R. Bush interests was demonstrated in the staking of a location for Merchants No. 1 approximately 1200 ft. east of the Federal well.

Standard Oil Co.'s L.A.I. No. 3-1, located south of the Bush Sentous No. 1, is drilling below 9000 ft. and though still in streaks of oil sand, has not shown great promise on formation tests.

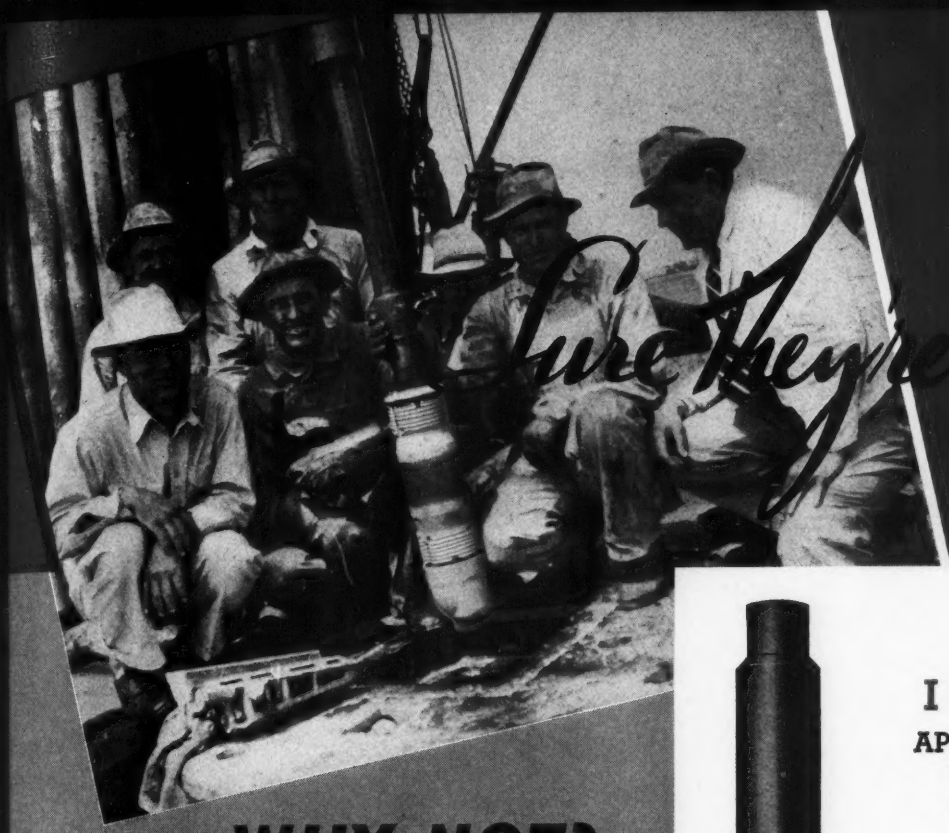
Rosecrans

Rosecrans, which has consistently been active for the past two years, appears to be building up to a new peak. In the southerly section of the field three wells are at critical stages in seeking production below established zones.

North of Compton Blvd. and west of San Pedro St., Midfield Oil Co. is testing several intervals by gun-perforating casing cemented on bottom at 9499 ft. Best showings were encountered from 8750 to 8920 ft. according to the electric log and some observers are of the opinion that a good well is more than possible, especially since tests close to bottom have shown lots of gas.

Near the intersection of Rosecrans Blvd. and Figueroa St., Union Oil Co. and Universal Consolidated Oil Co. are coring ahead in deep tests. The former company's Rosecrans No. 45 has passed the 8600 ft. level while the latter's Trust No. 8 is estimated close to 9200 ft. Neither concern is releasing information on formations encountered but the potentialities of both should not be discounted.

In search of more permeable sands northwest of the old limits of Athens production, Southern California Pet-



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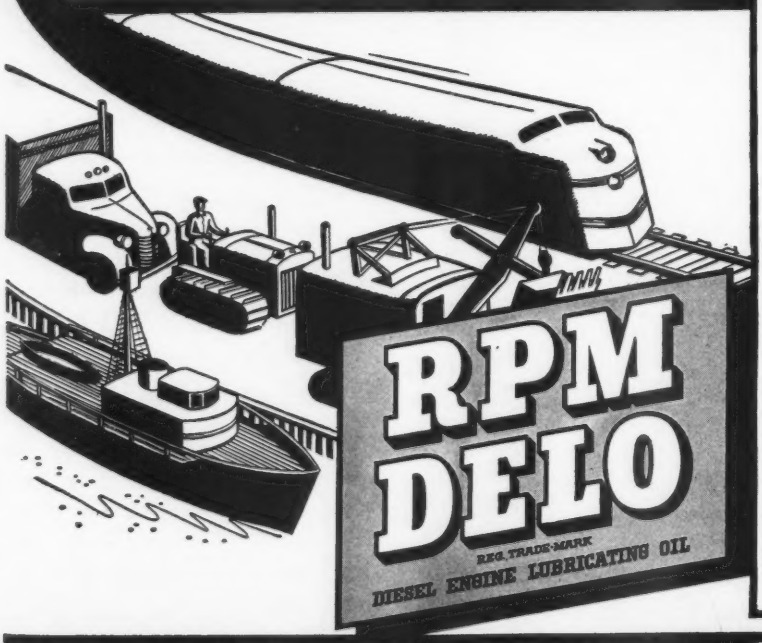

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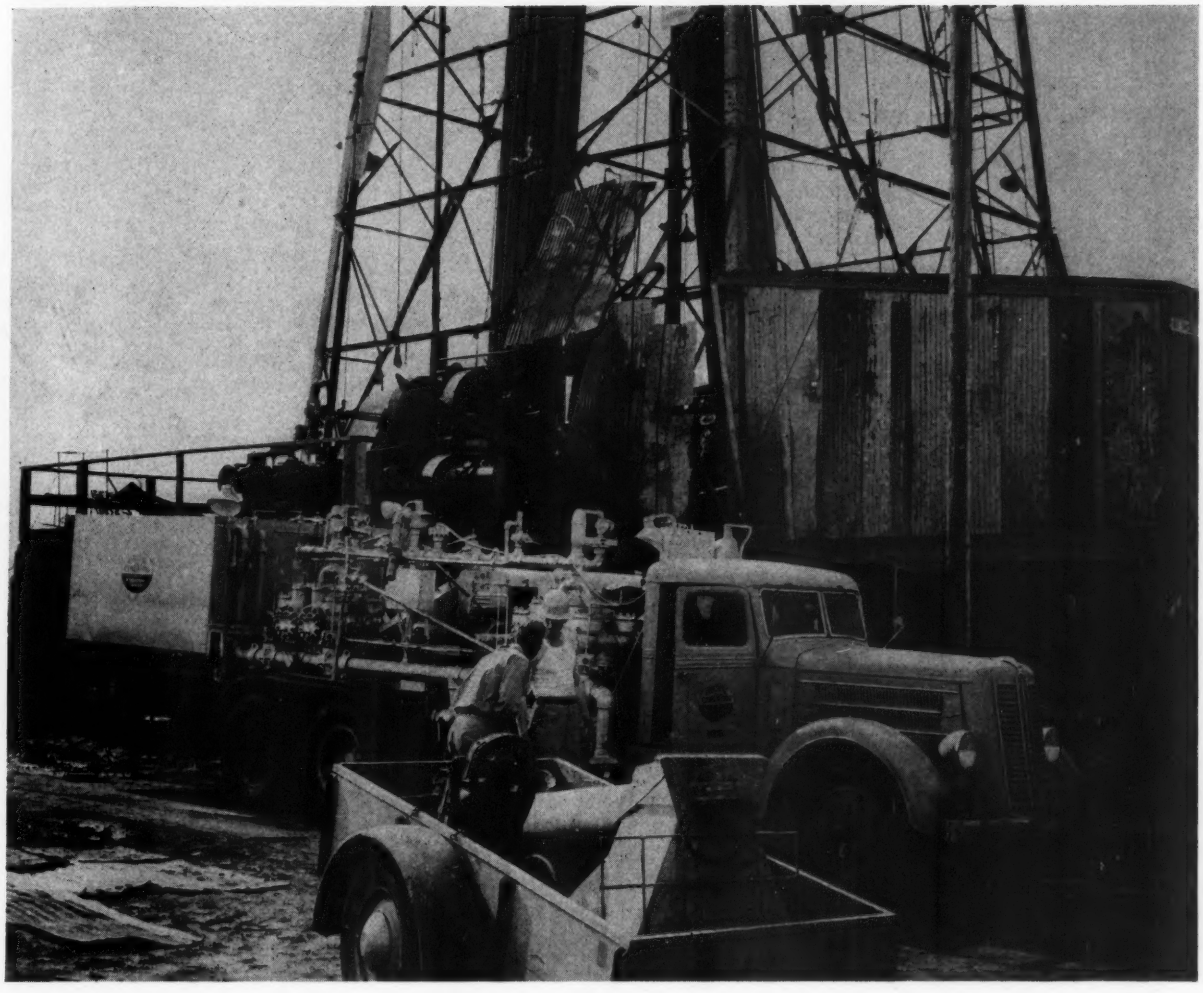


R. E. Havenstrite, Operator, cements a liner through perforations in Larronde No. 5, a directionally redrilled project in the westerly section of Dominguez.

roleum Corp. is preparing to drill Howard Townsite No. 1 at the southwest corner of 122nd St. and Vermont Ave. As several wells were required to find the good production at the south end of the field, it is not impossible that this will be the one to open a new northwest extension. It may be pointed out that Miocene production has been found northwest of Pliocene limits at both Long Beach and Dominguez and that Athens-Rosecrans is next in line.

Meanwhile, Royalty Service Corp. is drilling Stein No. 1 as the most southerly well in the Main St. area where limits have not yet been established. A completion here by Royalty Service will call for the drilling of several wells by operators holding offset acreage.

Wilmington-Torrance

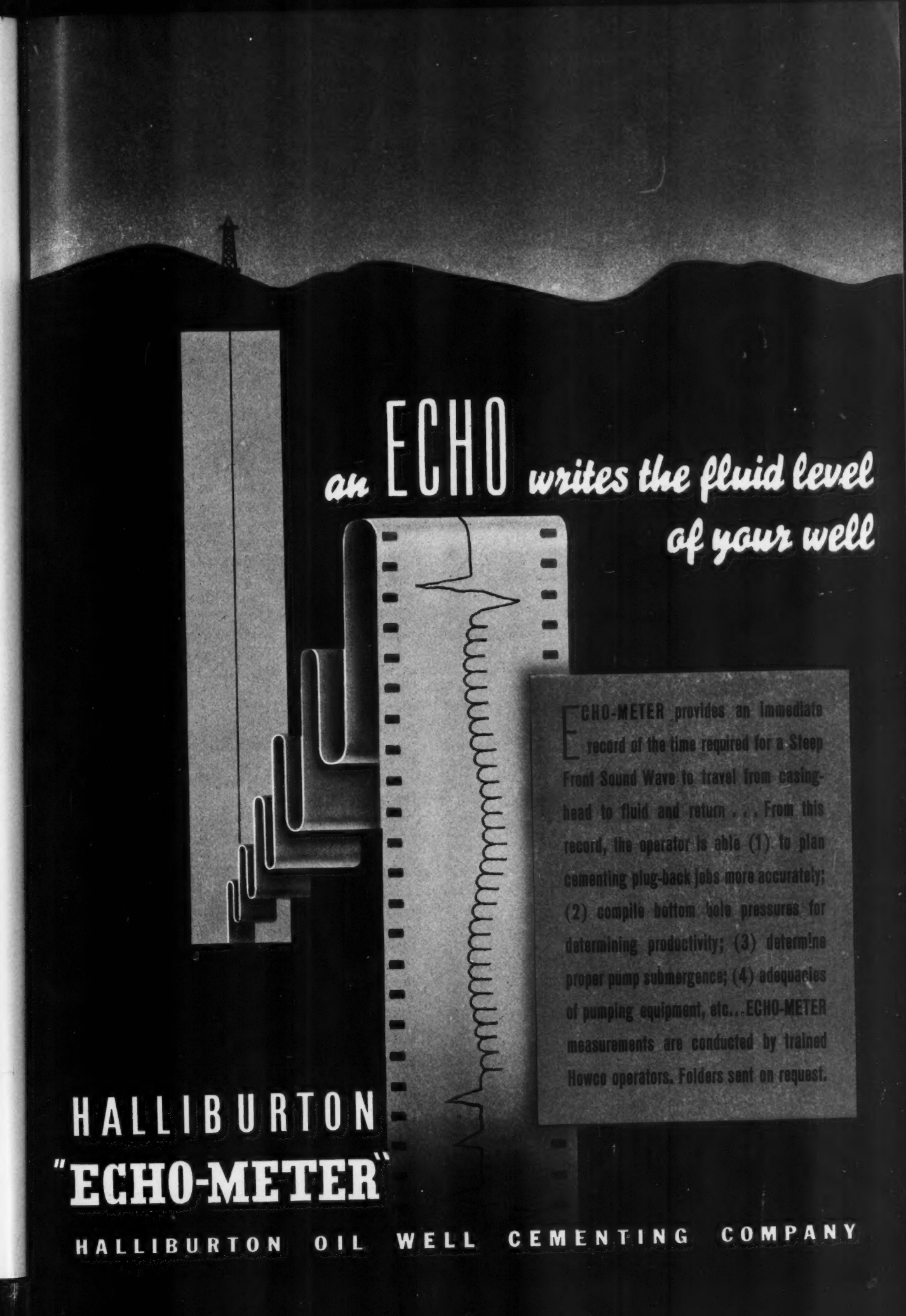
Completion of Silver Petroleum Co.'s well near the intersection of Figueroa St. and State St. (Highway No. 101) for 100 bbls. of 19 gravity oil per day has created quite a stir among those operators who have a liking for conservative yields at low drilling costs. Bottomed at 3761 ft. and producing the Upper Terminal zone below 3560 ft., the well proves the existence of commercial production between the Wilmington and Torrance fields and opens a large new area for development as rapidly as permits can be obtained from the Los Angeles City Planning Commission. New wells are already planned by J. E. O'Donnell, Acoma Oil Co., Los Angeles Basin Petroleum Co., and Bass, Goodknight & Westlund, all of which should get started within two to three weeks.

Basin Miscellaneous

Compared to the past year, the outlook for new developments in the Los Angeles Basin is generally brighter. Important exploratory wells are being drilled in the Long Beach and Dominguez fields while again talk is heard of a deep test at Huntington Beach. New drilling to the old Meyer zone is being considered at Santa Fe Springs where Union Oil Co. recently completed a well in the 2300 ft. gas zone.

In the Kraemer area east of Richfield, Valley Petroleum Co. is drill-

Western Gulf Oil Co.'s Lechler No. 1, appears to have found a new shallow field in Oak Canyon, four miles northwest of the Del Valle field. This late afternoon shot was taken while plugging bottom from 2442 ft. to 2415 ft.



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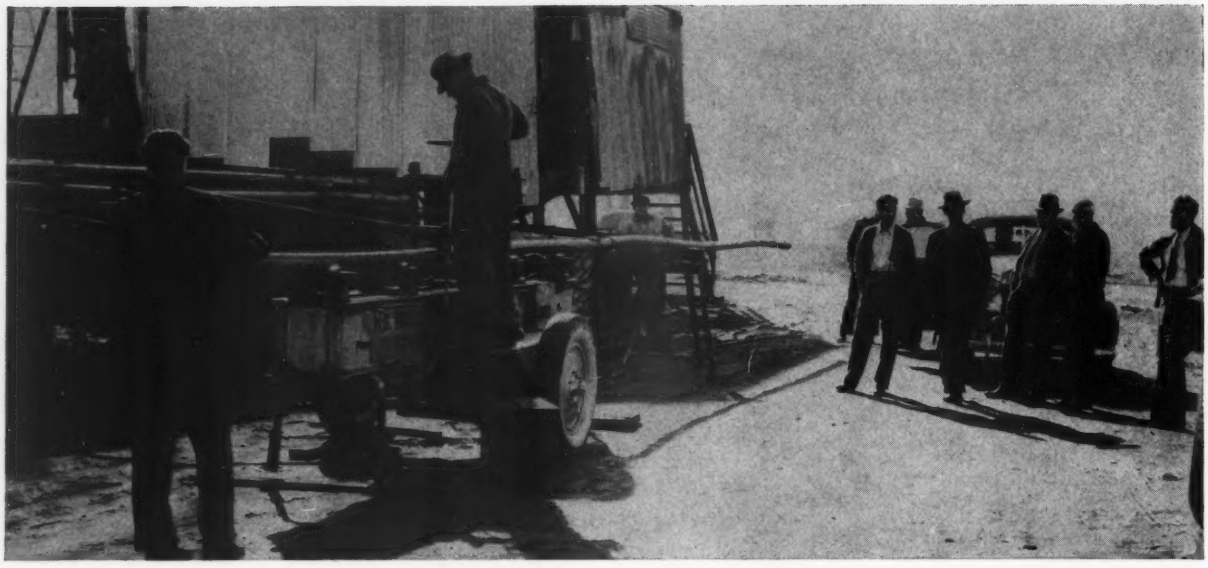


Midfield Oil Co. employed late type of equipment in straightening drill pipe dropped in its 9499-ft. Rosecrans deep test. From a heretofore untouched zone, the well is now flowing on a production test.

ing near the old Congress well and plans are being formulated by other concerns for additional new work.

Wildcatting, though dull at the moment, shows promise of becoming more interesting in the near future. South of the Redondo Beach end of the Torrance field, California Oil & Refining Co. is drilling its Cal-O No. 1 and should make or break within a week or two. The State Co. is making hole near the 2000 ft. level in its Puente project, Rowland No. 1.

Several wildcats are due for early drilling in Los Angeles and Orange counties and two outpost wells are scheduled for Redondo.

San Joaquin Valley

With no new major fields since the bringing in of Paloma in the summer of 1939, the San Joaquin Valley is ripe for the era of discovery which seems now at hand. Although a quickening of interest is general throughout the whole Valley, few projects have reached stages worthy of special mention.

Paloma

One of the most interesting conditions lately encountered in south Valley development came to light when Western Gulf Oil Co.'s Paloma field outpost, KCL No. B-12-12, entered a saturated zone apparently above the objective Stevens sands.

Located in sec. 12,32-26, well off the top of the structure a mile southeast of present production, the well topped a new horizon at 10,269 ft. and cored almost solid sand to 10,427 ft. Only a few fingers of shale were cored in the interval, the balance being a light colored sand which it is hoped contains light oil rather than the gas and condensate production found in the present Paloma field wells. While the new sands are for the most part fine and tight, they contain softer streaks with relatively good permeability.

Last reported bottomed at 10,535 ft. in streaks of gassy sand and shale, the well had not found the Chert zone which normally overlays the Stevens and was coring ahead in an effort to find the objective sands and thereby place the current sand body in its proper position in the geological section.

While the zone has not yet been identified, it is believed to be a buttress sand above the Chert and Stevens which may only be found on the south flank of the field.

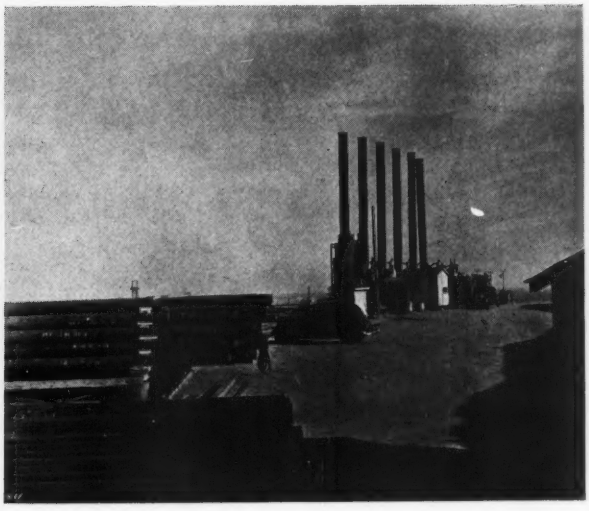
Nearest production to the current well is Western Gulf's KCL No. A-34-2 which was completed in the Stevens zone interval 10,311 to 10,711 ft. flowing 6,500,000 cu. ft. of gas with 720 bbls. of 54.5 gravity condensate through a 24/64 in. orifice.

At the north flank of the field, Ohio Oil Co. is coring Stevens zone sand in its westerly extension KCL No. 9-83-4 located near the east quarter corner of sec. 4,32-26. It topped the zone at 10,001 ft., 63 ft. lower than its nearest neighbor, Ohio's KCL No. B-3-23-3, and was last reported coring oil sand at 10,098 ft.

With a unitization plan being arranged for the field, the new information concerning Paloma formations and structure is doubly welcome, since re-pressuring and conservation plans must be predicated on a sound knowledge of reservoir conditions. With only five wells thus far completed in the yet new field, it is apparent that there is much to be learned through the medium of the drill.

Mendota

Hopes that commercial production may yet be developed in Cretaceous sands were bolstered by reports from Jergins Oil Co.'s Cheney Ranch No. 2 in the Mendota area. Located in sec. 29,14-13, a short distance southeast of the original Cheney Ranch well which repeated-



With the latest and best in equipment, Standard Oil Co. is drilling No. 42-31S as a deep test at Elk Hills.

ly tested high pressure, low volume Cretaceous gas sands near 7200 ft., the current try bottomed at 7354 ft. and plugged off bottom water to 7273 ft. With the hole open from the shoe of 7 in. casing at 7200 ft. to plugged bottom, the well was swabbed in on the 19th of January flowing circulated oil and an estimated 1,000,000 cu. ft. of gas through a ⅜ in. bottom hole bean which was set at 900 lbs. to maintain back pressure on the formation in an effort to prevent water breaking in around the plug.

A day later the well attained its maximum by flowing an estimated 1,395,000 cu. ft. of gas testing 1.6 gallons per thousand with a small amount of high gravity condensate. Last reports place the volume at approximately 935,000 cu. ft. of wet gas and 13 bbls. of 55 gravity condensate through a ½ in. bean with relatively low pressure. Observers report a gradually diminishing pressure reflected by a smaller volume and the possible entrance of water into the hole.

The structure was originally marked out by Jergins technicians who employed a soil-analysis method to define the play. Upon this basis Jergins drilled the first well which did find saturated sands but not a commercial yield. Feeling that the showings in Well No. 1 were worthy of further work, several large operating companies participated in the second well on an acreage basis.

Even if this particular closure in the Cretaceous does not prove commercial, it opens up a wide field for further deep drilling in the Valley, for heretofore only a tiny area in the Oil City field north of Coalinga has produced oil from this formation.

Round Mountain

Crestmont Oil Co.'s Russell No. 1 in sec. 6,28-29, in the Coffee Canyon area of the Round Mountain field is preparing to run casing for a test of oil sands which appear to be a bed of marine origin in the Walker series.

Believed to be a promising finger in the normally barren Walker, the sand was cored from 1580 ft. to 1680 ft. where hard gray sand carried to bottom at 1841 ft. The Vedder zone, normal objective sand in the area, was found barren at 1480 ft.

The well is to be plugged to 1680 ft. and 6⅝ in. casing run for tests which may for the first time find production in the Walker. This is the first erosive stage of granitics and overlays granite in the area.

Union Avenue

At the southerly limits of Bakersfield, in sec. 6,30-29, Hancock Oil Co. is gun perforating and testing Roberts No. 1. Considered by many to be a white hope in an already much drilled area, the well was bottomed at 5593 ft. after coring likely looking sands from 4100 ft. to plugged depth of 5380 ft. Casing was cemented at 5350 ft.

Nothing is known at the present writing of the results of early tests, but electric log pictures are said to have offered excellent chances at production in both Chanac and Santa Margarita formations.

Prospecting was not carried to any considerable depth because a 10,427 ft. well in the same section found the deep zones to consist largely of shale.

Nomads and their friends, especially those that attended the last Nomads Banquet and Ball, will be interested in the announcement that this years affair will be held on St. Valentine's Day (February 14th). The party preliminaries will begin at 7:00 p.m. followed by the dinner and dance. Attire for the affair will be Tuxedo. Admittance will be only by invitation.

The spacious and attractive dining room and dance floor of the Wilshire Country Club in conjunction with a big name orchestra assures all those attending of a brilliant affair in the traditional Nomad manner.

The committee appointed to handle this annual ball requests all Nomads to make the reservations for themselves and guests prior to February 7th. Requests for reservations should be made to F. C. Ripley, Jr., P. O. Box 2098, Terminal Annex, Los Angeles, California.

Opportunity in Shallow Production Areas

For Horizontally Drilled Wells

By Leo Ranney

Read Before the American Institute of Mining and Metallurgical Engineers
Los Angeles, California
January 10, 1941

In the extraction of fluids from the earth, the larger the exposed productive area the more copious will be the flow. It makes no difference whether the fluid be oil, water or gas. From time immemorial the common practice has been to recover fluids by drilling vertical wells into or through the productive horizon. Thereby the exposure of the producing formation is limited in length to the thickness of the bed.

Oil wells are often drilled 5,000 feet deep to penetrate 50 feet of productive sand—so 99% of such a well is a total loss, insofar as production is concerned. In water wells the percentage of useless hole is much smaller, because the wells are shallower, but due to a short radius of influence, high velocities of inflow, encrustation and sanding up, vertical water wells leave much to be desired.

If it is at all possible, why not drill wells that the 100% productive, instead of 1%? Then to recover oil, why not drill horizontal wells instead of vertical ones? Twenty five years have gone into the working out of this problem—and horizontal drilling is an accomplished fact. In the development of the method, some 1500 ft. of horizontal wells have been drilled in rock.

The first horizontal well was drilled into an old outcrop of the First Cow Run Sandstone in Morgan County, Ohio. This well was 2⅝ inches in diameter and had two branches, one to 802 feet and the other to 953 feet. The hole was turned up or down at will, and was never out of control. Not a single whipstock was used. At 802 feet of depth, the shorter branch of the well was 3 inches above the mouth. The other branch was turned into another substratum, then kept level to the end.

Saturation of the sand averaged less than 15%, and authorities on the subject, who analyzed the cores, reported that because of low saturation, no oil could be recovered by conventional methods in use. Yet, after the well was shot, when it had been on production for 6 weeks, daily recovery of oil was at a rate greater than the combined rate of the 50 nearest producing vertical wells in the field.

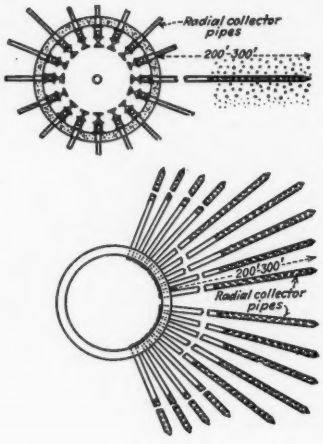
The oil flowed from the well by gravity.

After this encouragement, a concrete-lined shaft was sunk, 800 feet back from the first well, and 200 feet from another outcrop. A working floor was built 8 feet above the concrete bottom, and an enclosed tank was lowered into the sump, this tank to receive oil produced with the drill water. An electrically operated, specially built diamond drilling machine was placed on the floor in the center of the work chamber.

The wells from the work chamber at the bottom of the shaft were drilled in diametrically opposite pairs, the mouth of each well being 1 foot above the bottom of the sand. A new development that we call a "rod puller" was placed at the mouth of each well during the drilling operation, to run the tools in and out. When 30 to 50 feet of core had been cut in one direction, another core barrel and bit were placed in the mouth of the opposite well and the rear end of the drill rods connected thereto.

So, when a barrelful of core was being pulled from one well, the drill rods and the other set of tools were being run into the opposite well, by the same operation. New 10-foot lengths of drill rod were added as the holes were deepened, but the drill rods were not disconnected until both wells were completed. Thereby, drilling time was reduced by 75% to 90%. The "rod pullers" moved the tools out of one hole and into the opposite one at the rate of 100 feet per minute. Three pairs of holes were thus drilled, half of them to property lines, averaging just under 1,000 feet in length.

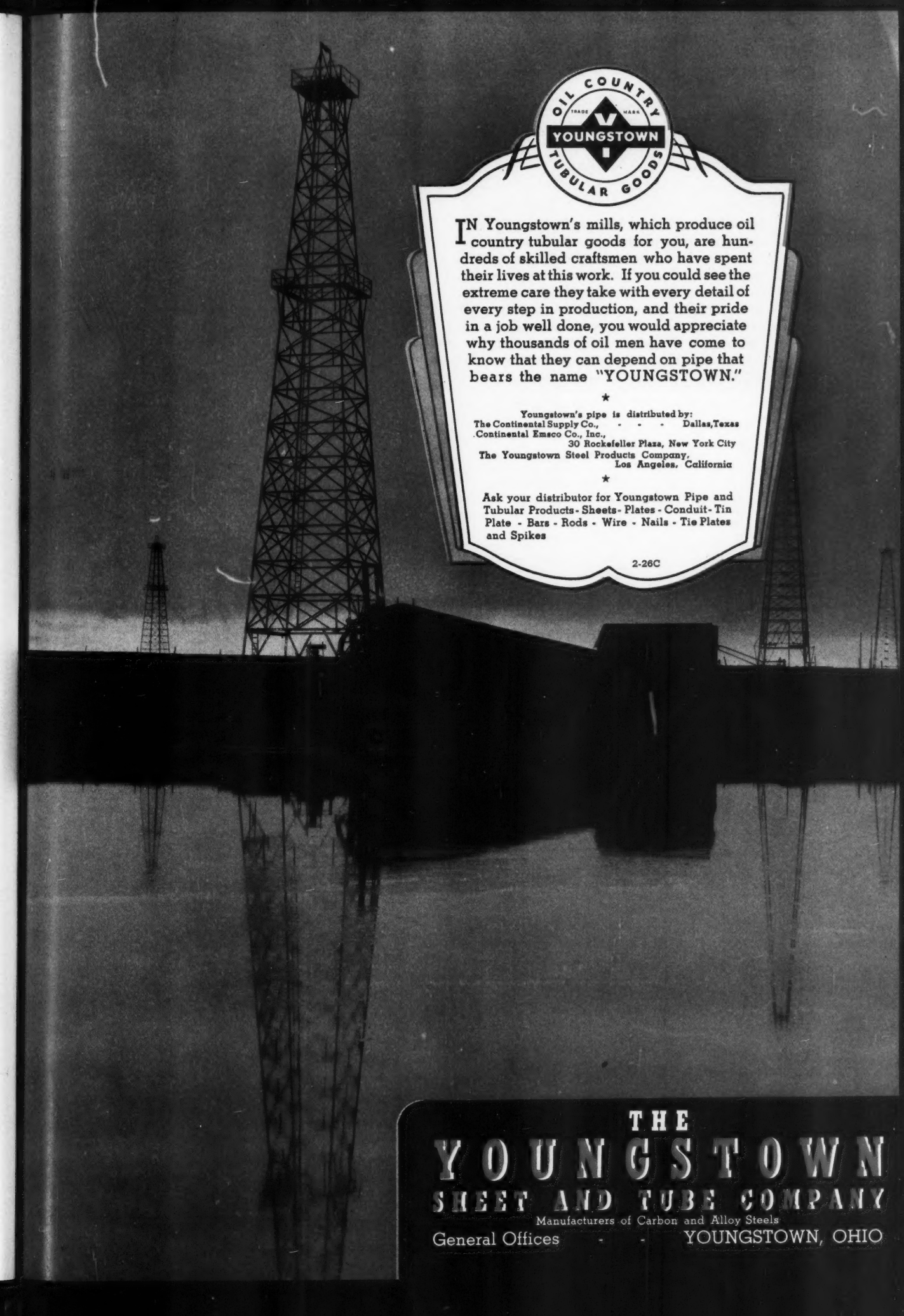
To the south the oil sand was flat, so the holes in that direction were level. But to the north the bottom of the oil sand was wavy, so the wells in that direction were turned up and down to follow the undulations of the formation. With the special tools used, about 10 minutes was required to turn the hole up or down at any desired angle—without the use of whipstocks. A new type of surveying instrument was developed, integral with the core barrel. With this instrument, when a core is pulled a survey of the hole is automatically taken, accurate to 1/16 of an inch per 10 feet.



Cross section and plan of Collector showing screen pipes.

Each horizontal well is cased with only 100 feet of 3½ inch pipe, grouted in. No other casing or tubing is required in a rock well. A cross on the end of each casing has one end pointed upward to receive vacuum or pressure. The bottom end of the cross of each producing well is connected to the flow line, which is a header leading to the common pump that

Drilling two wells at one time. "Rod puller" is moving tools out of one hole and into opposite one at a rate of 100 ft. a minute.



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Manufacturers of Carbon and Alloy Steels
General Offices - - YOUNGSTOWN, OHIO

Six wells flowing by gravity to bottom of shaft.

pumps all liquid to the tanks above ground. Oil and water flow from the wells to this pump by gravity.

As yet, none of the wells from the shaft bottom have been shot. Preparation is being made to shoot wells No. 1 and No. 5 for a length of 800 feet each, with a shot 2½ inches in diameter. Well No. 3 (which is between these two) will be shot only for 300 feet (at first) at the far end. A pressure medium of hot gas will be injected into the middle well, under a pressure of 30 pounds per square inch.

Since horizontal wells may be surveyed and controlled at a length of 1,000 feet as easily as at 100 feet, there seems to be no reason why holes may not be drilled 3,500 feet long. In other words, 800 acres of ground might be worked from one shaft. In drilling the 6 wells mentioned above there were no fishing jobs.

The drilling of horizontal wells is not difficult, once the technique is understood and the prescribed tools are in hand. However, during the past few months a company specializing in directional and slant vertical drilling has made two attempts to imitate the results herein described. Whipstocks were used to make the required changes of direction. Though 10 whipstocks were employed, at a length of about 1,000 feet, each hole missed its objective by some 500 feet and was 20 degrees off the desired direction. Both holes of course were abandoned.

Horizontal Gas Wells

Since scores of lives were lost during 1940 in coal mine explosions, due to the exudation of firedamp (which is only natural gas—methane) into the tunnels, it is now proposed to degasify the coal in advance of mining operations. This can be done by drilling horizontal holes out into virgin coal, from present used mine workings. Such holes to be spaced 800 feet apart and drilled 3,000 to 5,000 feet in length. Each hole to be cased for 400 feet and subjected to a high vacuum. Gas recovery costs will vary from 2c to 5c per thousand cubic feet. At the one experiment in removing methane gas from coal in place, in Ohio, there is available through one opening more than 2,000,000 cubic feet of gas daily.

The greatest natural gas reserves in this country are in the coal fields of Pennsylvania, West Virginia and Ohio. Several hundred thousand acres of coal in these states contain from 10 to 22 million cubic feet of absorbed natural gas per acre. Not only will its recovery be commercially profitable, but the fact that thereby coal may be made practically non-gaseous during future mining operations will greatly reduce ventilating costs and will remove a serious hazard to miners.

Horizontal Water Wells

In most instances horizontal water wells are from shallow shafts in unconsolidated material. They are known as Water Collectors. From near the bottom of a concrete shaft or caisson that has been sunk, 8-inch screen pipes are projected radially through the shaft wall, out into the water-bearing sand or gravel to lengths of 200 to 300 feet. On the forward end of each screen pipe is a "digging head" that removes the sand and silt from the gravel in the path of the pipe. The quantity of fines so removed may be from 4 to 10 times the volume of the screen pipe, resulting in the creation of clean gravel beds radiating from the central shaft. Each bed may be from 6 to 8 feet in diameter, and in the center of each is the screen pipe leading to the shaft from which the water is pumped.

In some cases as many as 3 circles or tiers of radial screen pipes are projected but always enough perforated pipe so that the velocity of water through the screen openings is less than 2/100 of a foot per second as compared with a velocity of 1 to 5 feet through screen openings of most vertical wells. Water moving into the horizontal screens from the gravel beds at the rate of only ¼ of an inch per second carries no fine sand and does not promote hardness.

By far the largest well in the world is of this type (the Water Collector), located at Canton, Ohio. The shaft there is 147 feet deep, from which radiate some 30 horizontal screen pipes, having an open-hole area of 1,250 square feet. Normal pumpage is about 15,000,000 gallons daily, but its capacity is several times this quantity.

Nine caissons are now being installed in various locations in the East, for industries and municipalities, to have a combined peak capacity of well over 200 million gallons per day. A very large Water Collector development for a single plant is being installed for the smokeless powder factory at Charlestown, Indiana. There the normal capacity will be 46 million gallons of water daily. Incidentally, this installation is costing the Government $1,000,000 less than would have been the cost of filters and an intake from the Ohio River.

Recharging Through Horizontal Wells

The real water problem in many parts of California is to charge into the ground the surplus water of wet seasons, for use during dry periods. In a few selected spots this may be done by the use of spreading grounds but in many other localities horizontal wells may be employed to distribute surplus water into the deeper sand or gravel reservoirs. Most attempts to recharge through vertical wells have failed, because of the limited screen area and the resulting high velocity of water passing into the reservoir bed.

For recharging, the Water Collector is reversed, that is, clear water passes down the shaft (which penetrates the intervening beds of clay), out into the radiating horizontal screen pipes, thence into the sand or gravel beds. Clear water for recharging purposes is best obtained from an upper row of horizontal wells or screen pipes, reaching from near the top of the shaft out into a shallow or surface body of sand or gravel that is saturated during wet periods. Thus recharging is accomplished by gravity flow.

If the water accumulating in the upper gravels during wet seasons is constantly collected and carried down the shaft, through the clay layers, and into the lower gravel reservoir, then a goodly part of the heavy rains will be utilized to refill the surface gravel beds. Consequently, the loss to the sea by flash floods will be much less than when the

upper beds are saturated at the time of heavy precipitations. In some cases low diversion dams may be built just downstream from a recharging installation.

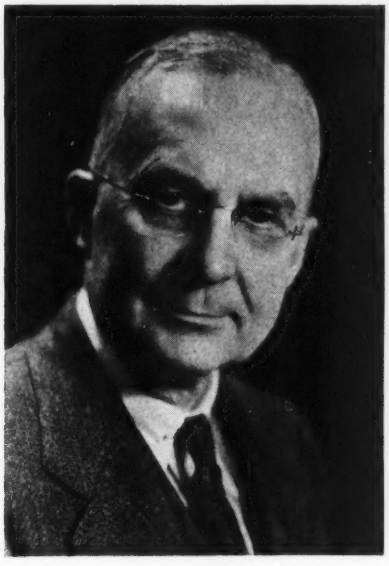
In a few favored locations the overflow from surface reservoirs during wet periods may be utilized for recharging nearby underground sand and gravel beds. As a possible example during the winter months from 3 to 6 billion gallons of water ordinarily flows over the Gibraltar spillway at Santa Barbara and is lost to the sea. At the same time, nearby Goleta and Carpinteria areas are lowering their water tables below sea level and are in danger of losing their whole groundwater supply through the encroachment of salt water. The average quantity of water flowing over the Gibraltar spillway each year is greater than the average annual consumption of both the Goleta and Carpinteria districts.

Conclusion

It will be seen that the development of horizontal drilling has many interesting possibilities. Its novelty may be appreciated by the fact that some 40 patents are being taken out to cover its methods and applications. The greatest present need is for personnel to carry on its development in the various fields that seem to be open.

G-E Advertising Man A.B.C. Founder, Dies

Fred R. Davis, a founder of the Audit Bureau of Circulations and advertising space buyer for the General Electric Co. at Schenectady for 35 years, died Dec. 26



F. R. Davis

at his home in Schenectady after an illness of two years. He was 64 years old. For many years he supervised the expenditure of more than a million dollars annually for newspaper and magazine space.

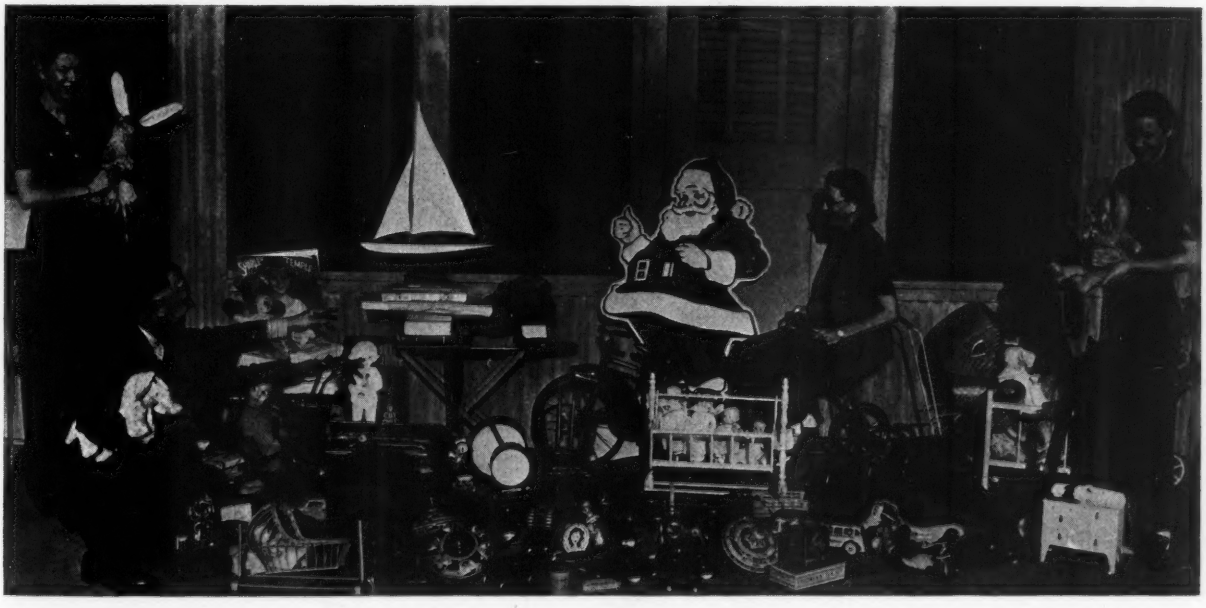
A man of scientific training himself, Mr. Davis was a pioneer advocate of accurate measurement in advertising and helped found the Audit Bureau of Circulations in 1914. He served as a director from that date until his death and since 1927 had also been first vice president of the organization.

The assignment of responsibility to D. S. Mix for Media and Publishers Relations, General Electric Publicity Department, Schenectady, has been announced by R. S. Peare, Manager of G-E's Publicity Department and Broadcasting. Under his new duties, Mr. Mix will have responsibility for the work formerly handled by the late Mr. Davis.

A native of New Haven, Conn., Mr. Mix was graduated from the Sheffield Scientific School of Yale University in 1917, joining General Electric immediately thereafter on editorial work in the Publicity Department. The following year he left the company for military service, returning to G. E. in 1919 when he was again assigned to editorial work in the Publicity Department. After promotional work in the commercial service section of the same department, Mr. Mix was made a contact man with responsibility for directing the advertising and sales promotion activities of a large number of G-E apparatus lines.

In 1929, Mr. Mix was made Copy Chief of the department in addition to his duties as contact man. Since 1932, he has devoted his time to Publicity Department training programs, personnel, and special assignments, which he will continue to handle.

Physicians are prescribing mineral oil for the complexion.



It's never too early to think of spreading Christmas Cheer. The program of the Santa Fe Girl's Club of the Union Oil Co. has included for the past two years the preparation of baskets of food for needy families. Here is a picture showing the toys, both new and reconditioned which the girls sent to children, along with seventy-five boxes of food, this last Christmas. Many representatives of companies doing business with Union Oil Co., have helped generously in this fine work of the Santa Fe Springs Girl's Club. In the picture, left to right, are: Blanche Kelley, James Huffman-Painter, Margie Walker, and Stella Hulihan.

THIS LAUGH

OFF!!

And **Bill Beck** contends that intuition is that quality in women commonly known as suspicion.

Whereupon we turn to refreshing musings on the age of innocence. **Joe Swaton** tells this story:

Mother—"Did you put your nickel in the collection box?"

Johnny—"No. I lost it."

Mother—"But this is the third week you've lost your nickel."

Johnny—"I know, but Billie's luck can't last forever."

While we're in this somewhat cynical vein we recount **Bud Broomfield's** story about two sweet young things.

Marjorie—"That man I met at your house took me out to dinner last night and he was very nice. He twice spoke about my bird-like appetite. What business is he in?"

Alice—"He runs an ostrich farm."

Tom Neilan was heard to tell this one:

He said: "Cigarette?"

"No, thank you, I don't smoke."

"Let's go up to the Ambassador Grill for a couple of drinks."

"No, thanks, I'd rather not drink."

"There are some very good pictures around town."

"I've seen them all."

"Care to dance?"

"No, please let's not. I want to go out and do something new, something exciting."

"Fine! Let's run down to the Sunset Farm on Sepulveda and milk hell out of a couple of cows!"

It was sad about the discouraged driller who committed suicide by drinking a bottle of shellac. But at least he had a good finish.

A neat tribute is that illustrated recently in a story told by **Jack Thomas.**

A lecture in economy had just come to an end. The chairman, who had been much impressed, was proposing a vote of thanks.

"And, now," he finished, "I'm going to ask you to give the speaker two hearty cheers."

Bob Roberts tells this one.

Sandy was a leader of the kirk. His increasing redness of nose very much alarmed his brother elders, and a delegation waited on him to inquire the reason for the increasing color. Sandy explained thus: "It is glowing wi' pride at never putting itself in anybody else's business."

And **Walt Duhig** says that the old narrow trails where two cars could hardly pass without colliding are happily being replaced by wide highways on which six or eight cars can collide at one time.

History records few women who laughed at the jokes of their husbands and those few had beautiful teeth, **George McKay** alleges.

We overheard **Otto Henckel** telling this one.

Attorney (for motor accident victim): "Gentlemen of the jury, the driver of the car stated he was going only four miles an hour. Think of it! The long agony of my poor, unfortunate client, the victim, as the car drove slowly over his body."

The absent-minded contest is won this time by the Los Angeles Basin druggist who was asked if he had a wife and replied no, but he had something just as good.

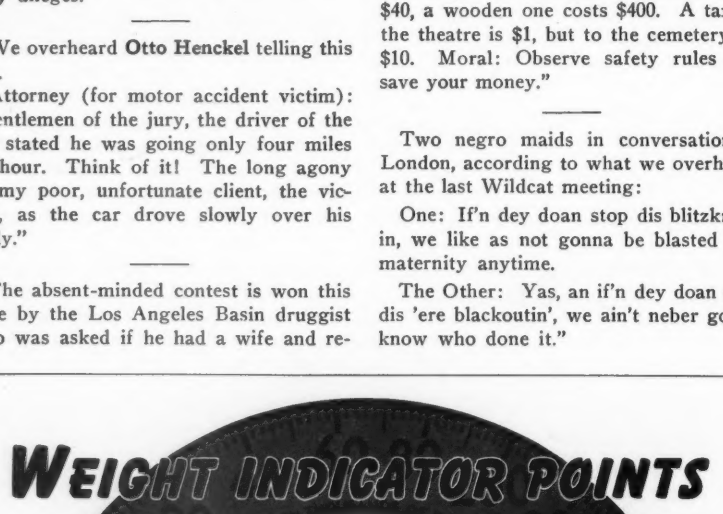
F. M. Powell told about the driller who was held up the other night by two men. It seems they held him up all the way home.

"The next time you feel the urge to throw caution to the winds and take chances around the rig or plant," warns **George Prussing,** "remember this: A live man pays 25 cents for a shave, a dead man pays $5. A woolen overcoat costs $40, a wooden one costs $400. A taxi to the theatre is $1, but to the cemetery it's $10. Moral: Observe safety rules and save your money."

Two negro maids in conversation in London, according to what we overheard at the last Wildcat meeting:

One: If'n dey doan stop dis blitzkriegin, we like as not gonna be blasted into maternity anytime.

The Other: Yas, an if'n dey doan stop dis 'ere blackoutin', we ain't neber gonna know who done it."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Field Development

Los Angeles Basin

Coyote Deep Well Pumps 610-Bbl. Rate

Bartholomae Oil Corp., pioneer of the new deep zone at the west end of the East Coyote field, brought in Stern No. 4 pumping at the rate of 610 bbls. of 26 gravity oil daily. An old well, hole was deepened to 7100 ft. where 5½ in. casing was landed and cemented at 5990 ft., the top of the perforated interval.

In the same area, Standard Oil Co. is deepening Coyote No. 2-14 to the new horizon.

California National Oil Co. is sidetracking a fish to complete its north flank well at approximately 3400 ft.

Dominguez Deep Test Cores Below 12,294 Ft.

Nearly 1000 ft. below the depth reached by the deepest well previously drilled in the Los Angeles Basin, Union Oil Co.'s Callender No. 79 is now coring below 12,294 ft. at Dominguez. Company officials refuse to comment on the well but the general impression is that only a few streaks of tight oil sand have been found below the Eighth Callender zone.

Shell Oil Co. finished two good wells in the central portion of the field while at the west end Union Oil Co. is drilling Callender No. 82 and is starting Austin No. 7. R. E. Havenstrite, Operator, is completing Larronde No. 5 and No. 6; the former a directionally redrilled project.

No work has been done yet on the abandoned Pongratz well but it is understood that a new concern will drill in the vicinity.

Five Points Well Completed on Pump

Clear View Oil Co. completed its Williams No. 2 in the Huntington Beach Five Points area with initial production estimated at 100 bbls. on the pump. An interval of approximately 80 ft. is open to bottom at 4250 ft.

Keeping two strings of tools running continuously, Signal Oil & Gas Co. is averaging one completion a week on the Bolsa property at the northwest end of the field. Typical is No. 21 which drilled to 3250 ft., plugged to 3000 ft., ran water string and liner and completed in an elapsed time of 14 days. Production was 269 bbls. a day of clean oil flowing through a 47/64 in. bean.

Pacific American Oil Co. is preparing to bring in No. 4 on the Encyclopedia

LOS ANGELES BASIN WILDCATS

Area	Well	No.	Section	Depth	Status
Athens	Rankin & Williams	1	7, 3-13	8831	Drilling
Castaic	Colter, R. T., Explor.	1	8, 4-17	1338	Cleaning out
	Havenstrite, R. E., Lincoln	3	16, 4-17		Grade
	Havenstrite, R. E., Vasques	1	24, 4-17		Rig
	Pedro Pet. Co., Oates	1	24, 5-17	2205	Idle
	Universal Cons. Oil Co., Dennis	1	21, 4-17		Rig
	Western Gulf Oil Co., Lechler	1	31, 5-17	2442	Testing
	Worland Oil Co., Jenkins-Owens	1	18, 5-16	2940	Idle
Dominguez, West	Wood-Mellon Oil Co., Wood	1	31, 3-13	7498	Idle
Malibu	Soverign Oil Corp., Sovereign-Marblehead	1	7, 2-18	3469	Idle
Mint Canyon	Redwood Oil Co., Mitchell	2	22, 4-15	1580	Idle
Monterey Park	United Petroleum Co., Haig	1	26, 1-12	3681	Idle
Newhall	Canyon Oil Co., Sanborn	1	6, 3-16		Rig
	Creighton Hammon Synd., C. H.	1	17, 3-16	990	Idle
	Lee, Wm. Y., Irene	1	31, 4-15	300	Idle
Palos Verdes	Rolling Hills Pet.	1	27, 4-14	6580	Idle
Redondo	Calif. Oil & Ref. Co., Cal-o	1	18, 4-14	910	Drilling
Puente	The State Co., Rowland	1	14, 2-10	1422	Drilling
San Fernando	Casa Grande Oil Co., Lopez-Lundy	1	1, 2-15	3785	Idle
West Whittier	Cal. Pico Oil Co., Beach	1	7, 2-11	7788	Idle
	Orange County				
Costa Mesa	Thompson, Milton N., Banning	1	9, 6-10	5649	Idle
Kraemer	Valley Petroleum Co., Kraemer	1	25, 3-9	410	Drilling
	San Bernardino County				
Carbon Canyon	Earp, H. R., Kraemer-Backs	1	34, 2-8	1352	Idle
	May, Homer, Oasis	1	31, 2-8		Rig

NORTHERN COUNTIES WILDCATS

County	Well	No.	Section	Depth	Status
Humboldt	Daly, M. B. Jr.	1	2, 1n-2e	3204	Bldg. rig
Madera	Blake, T. N., Arnold	1	22, 10-17	3204	Idle
Merced	Don Pedro Oil Co.	1	9, 6s-9e	1906	Idle
Mendocino	Keyt, N. F.	1	3, 12n-17w	210	Drilling
Monterey	Loma Grande Oil Co., Corey	1	23, 24s-10e	2175	Idle
	Priest Valley Pet. Co., Greve	1	22, 20s-12e	2885	Idle
San Mateo	Ra-Lite Petroleum, Inc., Bell	5	16, 7s-4w	1200	Idle
Solano	Richfield Oil Corp., Potrero Hills	3	10, 4n-1w	3800	Abandoned
Yolo	Standard Oil Co., Tippets	2-1	9, 12n-3w	3240	Idle
Yuba	Wright, L. G., Cox	1	18, 14n-5e	1795	Idle

lease after redrilling to 3890 ft. while Standard Oil Co. is rigging up Huntington No. A-35 and Southwest Exploration Co. is drilling its No. 36.

Hellman Extends Seal Beach Field

Completing its No. 6 well with a potential of 1500 bbls. a day, the Hellman Estate Co. extended the Seal Beach field several hundred feet farther easterly into Orange county. Gravity of the oil is 28.5 degrees and the cut less than 1.0%.

The 293 ft. of formation immediately above bottom at 5670 ft. is open to production.

Union Oil Plugs Deep Hill Well

Apparently finding no encouragement in the bottom, Union Oil Co. plugged its deep Signal Hill well, L.B.C. No. 19, from 10,894 ft. to 10,670 ft. As an electric log was run before setting the plug, it is assumed that casing will be cemented and a production test made at that depth. Located at 25th St. and Gaviota Ave., the well is across the street from Dormax Oil No. 1 which was finished in December of 1939 flowing 350 bbls. by gas lift from 10,411 ft.

Royalty Service Corp.'s I. C. No. 1, located on California St. a block south of Wardlow road, is below 5500 ft. on its way to the 6500 ft. level where production will be sought. Suspected faulting is said to be the basis of the play.

Wilmington Field Statistics Given

The Wilmington field is made to order for those whose minds love to dwell on statistics. For instance—In its four years and one month of existence, almost an even 1000 wells have been drilled, 950 of which are on production at the present time and 20 or so are shut in. On January 1st, (and its higher now) the field's potential was 687,580 bbls. a day which is 210,000 bbls. more than the combined potentials of all the other Los Angeles Basin fields put together and only 70,000 bbls. shy of being twice the combined potentials of all the coastal fields.

In order to drum up any competition at all we must combine the potentials of the two Coalinga Eocene fields which gives us 634,658 bbls. but then we're more than 50,000 bbls. short. "Ah," you say, "but you forget Kettleman Hills!" But there again we have you. Kettleman North Dome is but a poor third to Rio Bravo, their potentials being 217,343 bbls. and 283,852 bbls. respectively. By this time you should be sufficiently impressed so we'll conclude with the statement that it's something when a field like Wilmington can be curtailed voluntarily to 12½% of its capacity.

Montebello Well Flows 800-Bbl. Rate

Recompleting Paul J. Howard No. 3 after deepening from the Fifth Zone to 7707 ft., Union Oil Co. obtained a yield estimated initially at 800 bbls. a day of 35 gravity clean oil and approximately 5,000,000 cu. ft. of gas. Cut back with a 30/64 in. bean, production was 500 bbls. daily and 4,000,000 cu. ft. of gas.

This is the best well in the Montebello field in well over a year.

Mechanically, Howard No. 3 is finished with 8⅝ in. casing cemented at 5407 ft. and 2362 ft. of 5½ in. liner containing 181 ft. perforated landed on bottom at 7707 ft. A "c.p." job was done at 7518 ft. which is the top of the lower perforated interval. All oil sand intervals were then shot below 7108 ft. giving the well an unusually large amount of sand to draw from.

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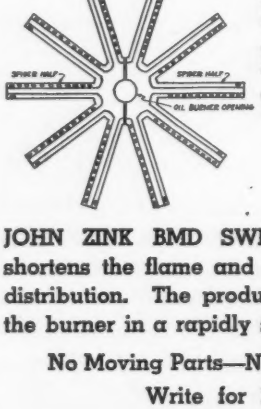

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San Joaquin Valley

C. C. M. O. To Drill Pyramid Hills Try

The Chanslor-Canfield Midway Oil Co. has located Bacquarez No. 1 in the southwest quarter of sec. 17,24-18 in the Pyramid Hills area of Kings county. The proposed try is but a half mile northwest of Tide Water Associated Oil Co.'s West Slope No. 1 which pumped 40 bbls. of 16 gravity clean oil from lower Miocene sands at 950 ft. The production was obtained from plugged bottom after exploring to 2087 ft.

Tide Water drilled two other wells in the vicinity, neither of which found oil sands although each is believed to have drilled to the Cretaceous, which outcrops not far distant.

A mile east of the current try, Royalty Service Corp. drilled Spreckles No. 1 to a barren 4201 ft. in 1936.

Texaco Again Drills Cantua Creek Area

Persistent in seeking production along a general trend through the Cantua Creek area of Fresno county, The Texas Co. has spudded S. P. No. 27-13 in sec. 13, 17-15.

The 15th to prospect the area, the well was last reported below 2700 ft. after setting 11¾ in. casing at 1135 ft. This try is a half mile northeast of the company's S.P. No. 1 which flowed a small amount of condensate, salt water and gas from Eocene sands at 9413 ft.

Wells in the area have ranged from 6500 to 12,300 ft. and have shown promise enough to stimulate continued activity. Earliest encouragement was in Western Gulf Oil Co.'s S.P.L. No. 3 in sec. 3,17-15 which in 1937 drilled to the Eocene at 8531 ft. and was plugged to Temblor sands at 6950 ft. where some 35.8 gravity oil was recovered.

Plans To Drill Kern River Well

Da-Me Oil Co. has taken over the Da-Bar Oil Co. holdings in sec. 13,28-27 in the Kern River area and plans to start work immediately on a new well.

The company is under the direction of E. C. Meager and M. Davis with the capital reported subscribed by a Pasadena group.

Buttonwillow Try Now Under Way

Drilling at 4000 ft., The Texas Co.'s S. P. No. 47-15 in sec. 15,29-24 is seeking a new field in the Buttonwillow area. Already drilled below 12,000 ft. in two prior tries, the region remains interesting since each of the earlier holes encountered bodies of sands showing evidence of oil and gas. Failure to find production in the first wells is attributed to the fine, tight nature of the sand.

Wood-Callahan Re-Enters Edison

Only active string in the Edison area is Wood-Callahan's Heyden No. 2 in sec. 21-30-29. Presently rigging up, the try is one location northwest of No. 1 which was finished on the pump early in 1940 from plugged bottom at 3620 ft. for 125 bbls. of 18.6 gravity clean oil.

Wheeler Ridge Try Resumes Drilling

Richfield Oil Corp.'s Wheeler Ridge-KCL No. 2 in sec. 28,11-20 on Wheeler Ridge at the south rim of the San Joaquin Valley, is coring ahead in hard gray sand near 11,550 ft. after a short shutdown for mechanical repair.

Nothing of promise has been reported since 10,934 ft. where formation tests of grayish looking sands, appearing simlar to those producing in north Valley fields, yielded only salt water with a trace of oil.

On the plains to the southeast in sec. 2,10-19, Richfield's Tejon Ranch No. 1 is spot coring below 9910 ft. Located south of the small Grapevine Pool, the well has encountered nothing of significance to date and is prospecting an area about which little is known.

Kettleman Outpost Flows Salt Water

Off the extreme southeasterly tip of the Kettleman North Dome field, near the northwest corner of sec. 1,23-18, Standard Oil Co. recemented the water string in No. 1-1U. Bottomed at 10,968 ft. after finding the McAdams, or Eocene sand, at 10,851 ft., 6⅝ in. casing was cemented at 10,865 ft. The flow resulting from a formation test of the interval consisted of 1765 grain salt water at a 400 bbl. rate showing only a trace of oil.

Bottom was plugged to 10,870 ft. with 40 sacks of cement after which the shoe of the 6⅝ in. was squeezed with another 65 sacks.

Results of this well are important as an index to the quality and area of Eocene production at this end of the field. A series of deep wells have already demonstrated that the Eocene is productive over the entire north half of the field

SAN JOAQUIN VALLEY WILDCATS

Area	Well	No.	Section	Depth	Status
	Fresno County				
Cantua Creek	The Texas Co., S. P.	27–13	13, 17-15	2681	Drilling
Coalinga	Lewis, C. H.	1	18, 21-15	2298	Idle
Gatos Creek	Gatos Creek Oil Co.	1	19, 19-13	725	Idle
Mendota	Jergins Oil Co., Cheney Ranch	1	29, 14-13	9345	Idle
		2	28, 14-13	7354	Flowing gas
	Kern County				
Belridge—South	DeLanty & Sutton, Trustees	1	28, 28-22	3020	Idle
	Santa Mora Oil Co.	1	10, 28-20	544	Idle
Buttonwillow	The Texas Co., S. P.	47–15	15, 29-24	3398	Drilling
Devils Den	Herzog, R. D., Marine	28	26, 25-18	141	Pumping
	Herzog, R. D., Marine	1	26, 25-18	708	Idle
Edison	Goodrum & Vincent, Inc., S. P.	7	31, 29-30	460	Idle
	Kern Valley Drlg. Co., Williams	1	30, 30-30	316	Idle
Grapevine	Kern Line Oil Co.	1	19, 11-19	8320	Stdg. cem.
	Richfield Oil Corp., Tejon Ranch	1	2, 10-19	9908	Drilling
Lost Hills	Randan Pet. Corp., Theta	1	3, 26-20	1625	Idle
McKittrick	Smith, Ebert E., Smithhart	1	34, 30-22	2278	Idle
Richgrove	Borget, A. J., Kendall	1	16, 25-27	40	Idle
Round Mountain	Spartan Drlg. Co., Hiatt	1	32, 28-29	2085	Idle
	Crestmont Oil Co., Russell	1	6, 28-29	1845	Stdg. cem.
Shafter	Continental Oil Co., KCL	C–2	35, 27-24		Rigging up
Strand	Tide Water Assoc. Oil Co., KCL	56–8	8, 30-26		Location
Union Avenue	Hancock Oil Co., Roberts	1	6, 30-28	5593	Testing
Wheeler Ridge	Richfield Oil Corp. KCL	2	28, 11-20	11519	Drilling
	Kings County				
Pyramid Hills	Bristol Oil Co., Smith	1	35, 24-19	8054	Testing
	Chanslor-Canfield Midway Co., Bocquarez	1	17, 24-18		Location
	Pyramid Prod. Co., Spreckles	2	16, 24-18		Rig
Reef Ridge	Blair Oil Co., Blair	1	24, 23-16	72	Idle

and a successful completion here would indicate that the deep sand conforms in general to the area of the Temblor production which made the field one of the most famous in the state.

Two Wells Completed Near Coalinga Shoreline

At the southerly end of the Coalinga Northeast field and near the westerly pinch-out of the shoreline, two wells have been finished for substantial yields.

Pacific Western Oil Corp. and Geo. F. Getty, Inc. finished East Coalinga Community No. 2 in sec. 30,19-16 from 8250 ft. for 1023 bbls. of 26.6 gravity clean oil through a 12/64 in. bean. Gas volume was measured at 625,000 cu. ft. The operators are staking location for No. 3 to be drilled at once.

The second completion was marked up in the same section by Pure Oil Co. when it finished East Coalinga Subdivision No. 2 from 8289 ft. for 1594 bbls. of 27 gravity oil and 668,000 cu. ft. of gas. The flow was through a 16/64 in. bean with 1170 lbs. pressure on the tubing and 1200 lbs. on the casing.

Pure is also redrilling Schwinn No. 2 which yielded only 20 bbls. on gas lift from 21 ft. of Gatchell sand. It is probable the hole will be kicked as far as possible to the east to take in all the zone afforded by natural thickening. Bottom of the original hole was in siltstone at 8300 ft. with the base of the Gatchell found at 8272 ft.

Bandini Petroleum Co. is rigging up to drill No. 56-30B in section 30 while another well in the same section, Wilshire Annex Oil Co.'s 53-30B, is awaiting production tests with bottom at 8256 ft. Wilshire meanwhile is skidding rig to drill No. 54-30B.

At the north tip of the field, Amerada Petroleum Corp. is drilling No. 24-17B near 4000 ft. in sec. 17,19-16.

Superior Oil Co.'s Husong No. 6 in sec. 18,19-16 was last reported at 7500 ft. while Standard Oil Co.'s activity is represented by two strings: No. 88-7B drilling at 5250 ft. and No. 48-19B at 6356 ft.

Elk Hills Test Cores Showings

Standard Oil Co.'s super-rigged No. 42-31S, in sec. 31,30-24 on top of Elk Hills, cored oil showings from 5008 to 5030 ft. and is drilling below 5400 ft. This well is rigged to go as deep as necessary to test the area. Preparations included the buying of new design drawworks, engines, pumps and so on right down to 16,000 ft. of new drill pipe. Operators claim no intention to break existing records for speed or depth but rather plan a careful examination of the geologic prospects in the area.

Furthering their contention that they are interested in exploration, the company has spudded a shallow test, No. 44-29S, a little more than a mile to the northeast and has located another deep test and a shallow test in the central and southwest portion of sec. 19,30-24, a little more than a mile and a quarter north of the present prospect hole.

Coles Levee Work Continues Brisk

Drilling activity in the Coles Levee field continues at a brisk pace with four companies, supplemented by the larger drilling contractors, running 12 strings of tools.

Ohio Oil Co. is busy with two jobs in sec. 3,31-25. Deepest is KCL No. F-13, 45-3 which is coring in cherty shale at 9321 while KCL No. F-14,87-3 was reported at 4152 ft.

Richfield Oil Corp is running eight of the outfits, some of which are contract

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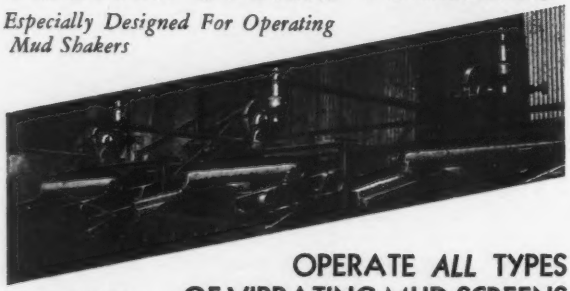

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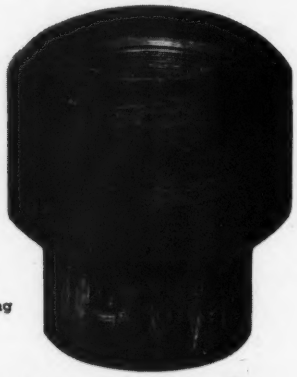

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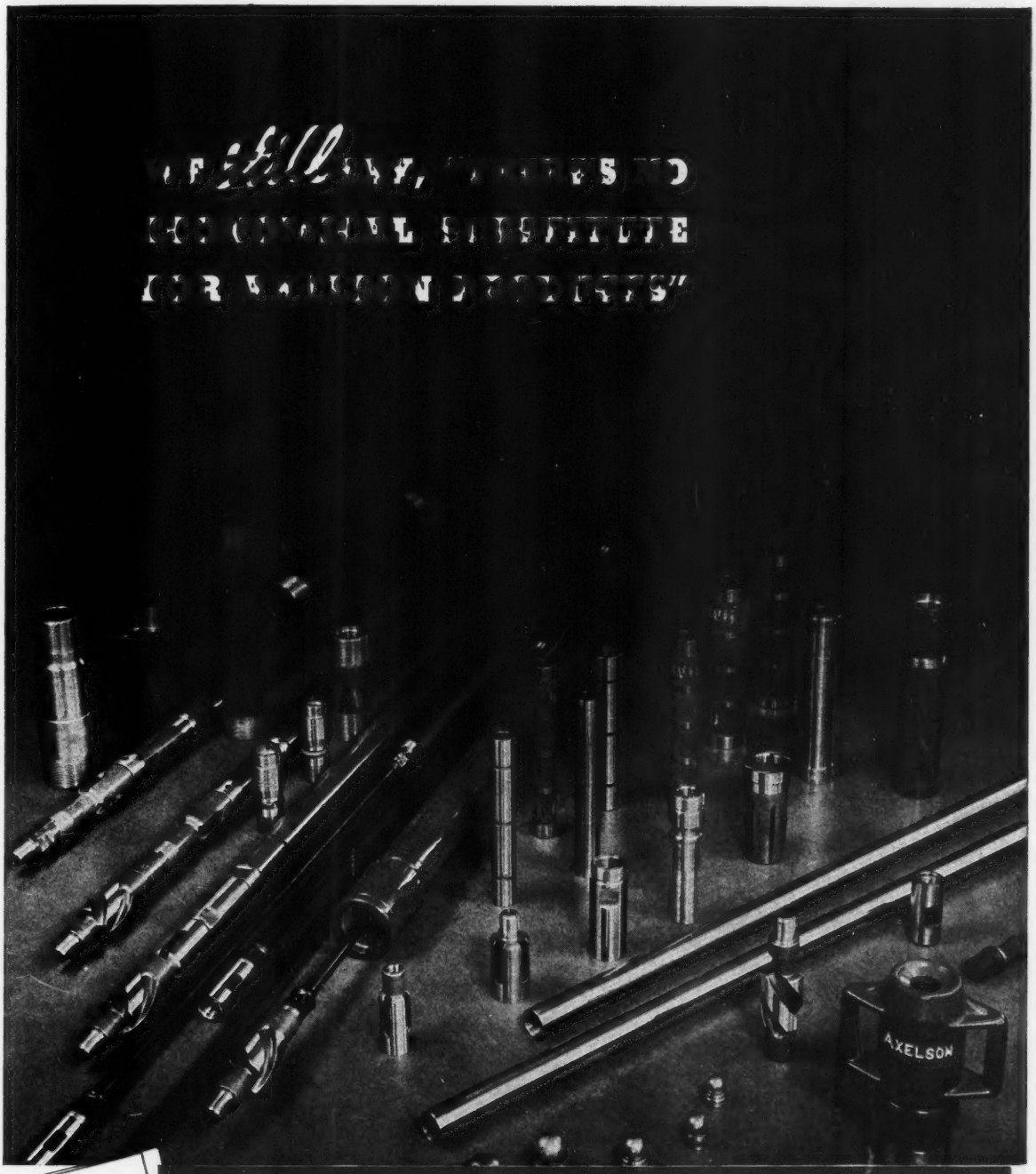

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jobs. Depths range from the grass roots to points in the oil sands with completions imminent. Among those about to be finished are: KCL No. A-25-28 which is bottomed at 9340 ft. after marking the good oil sand at 8464 ft.; KCL No. A-74-29 which flowed 700 bbls. of oil and 7,000,000 cu. ft. of gas on formation test at 9015 ft. and KCL No. A-76-32, a 9200 ft. hole which is being finished in 373 ft. of zone.

Richfield's latest completion is KCL No. A-45-29, in sec. 29,30-25, which initialed a 1900 bbl. rate from 400 ft. of zone to bottom at 9300 ft. Also finished last week was KCL No. A-14-32, in sec. 32,30-25, flowing 1363 bbls. of 33.5 gravity oil in 22 hours. Gas accompanying the gauge was measured at 1,000,000 cu. ft.

At the west flank of the gas cap area, in the hills west of the Taft highway running through sec. 5,31-25, Standard Oil Co.'s KCL No. 20-8 is coring streaks of sand and shale at 9136 ft. after finding the first oil sand at 8890 ft.

Near the south quarter corner of sec. 2,31-25, at the northeasterly flank of the southerly section of the field, Union Oil Co.'s Kernco No. 58-2 is bottomed in oil sand at 9925 ft. after finding the top at 9494 ft., 56 ft. lower than nearest production and conforming to the expected contour of the outpost site. Union also plans to drill No. 72-11 in the northeast corner of sec. 11,31-25 as a further extension try.

Standard Completes North County Gasser

Another gasser was added to the roster of Tracy area wells when Standard Oil Co. completed Blewett Comm. No. 1 in sec. 25,3s-6e of San Joaquin county.

Bottomed at 3872 ft., the well was finished flowing 9,292,000 cu. ft. of gas through a 40/64 in. bean with 1125 lbs. tubing pressure and 1115 lbs. on the casing.

Buena Vista Well Nearing 12,000 Ft.

In the Buena Vista Hills, sec. 10,32-24, Honolulu Oil Corp.'s well No. 25P is hanging up a drilling record to shoot at being last reported at 11,974 ft. The outfit in use is an electric rig designed for only moderate depth. Surely anyone familiar with the heavy going found in 12,000 ft. California digging will agree that this is far in excess of moderate depth. The deepest electric made hole in California, this well has far surpassed the record of 10,427 ft. hung up in the Bakersfield area in 1939.

Designated as a exploration project, the well proposes to drill as deep as necessary to properly examine the section. Thanks to the advantage of a high structural location the well is already 6000 ft. lower in the geologic column than the nearest prior deep try, General Petroleum Corp.'s 11,886 ft. BV No. 1 in sec. 1,32-24.

Strand Vedder Try Below 11,500 Ft.

Tide Water Associated Oil Co.'s KCL No. E-25-27 efforts to find Vedder zone production underlying the Strand field may be nearing an answer. Located in the heart of Stevens zone production in sec. 7,30-26, the well is seeking the deep production found below the Stevens in nearby central Valley fields. The Strand field producing interval was cored from 8286 to 8530 ft. with no further showings reported to present depth of 11,535 ft.

Otis Hoyt Spuds McKittrick Well

In sec. 6,30-22 of the McKittrick area, Otis Hoyt has spudded Union No. 2 and cemented surface casing at 108 ft. Well No. 1, on an adjacent location on the property owned in fee by Union Oil Co. was completed from 2526 ft. for 85 bbls. of 16.0 gravity oil late in the summer of 1940. Persistently troubled with sand, the well was being redrilled when mechanical difficulties forced suspension of the work, and the start of the new well.

Administrator Releases State Potential Data

According to data released by the Conservation Committee of California Oil Producers, 76 new wells were completed in December with a daily potential of 83,506 bbls. while 27 old wells were recompleted with potentials totaling 3636 bbls. and 29 were returned to production adding 2499 bbls. of new potential. The shutting down of 58 wells and the abandonment of 16 others reduced the State's potential by 8648 bbls. which together with readjustments revised the grand total upward 81,649 bbls. The net increase in new allowables, however, was only 8261 bbls. a day.

Of the 143 wells establishing new potentials, 35 were classed as marginal, 74 as intermediate and 34 in the top category. These figures include eleven wells whose potentials were corrected during the month.

On January 1, 1941, 19,392 wells in California, whose combined potentials totaled 3,356,929 bbls. a day, were producing 591,185 bbls.; an excess of 20,248 bbls. over the January allotment. Top allowable per well remained at 148 bbls. a day for the month.

Coastal District

Huasna Well Still Testing

The "Tex" Harvey Oil Corp. is still attempting to make a commercial producer of its Gilmore Community No. 1 located in sec. 11,32-14 in Huasna Valley. Tubing has been raised and lowered in trying to find a level where more oil and less water could be raised but production so far has not been greatly improved. Approximately 1000 ft. of formation is open at intervals above bottom at 4520 ft.

The company's Gilmore Community No. 2 is standing rigged up but has not been spudded on account of the rainy weather. The second well, located only a few feet from No. 1, is scheduled to go deeper in hopes of finding production in the Vaqueros which is believed to be only a short distance below the bottom of the first well.

Del Mar Rigging Sta. Barbara Well

Del Mar Oil Co. is rigging up to drill an interesting wildcat well 800 ft. north of Highway No. 101 and 500 ft. east of Turnpike Road, approximately three miles west of the city of Santa Barbara. In the same section, 11,4-28, Standard Oil Co. drilled a 2500 ft. test some years ago.

Mesa Well Deepens, Then Plugs Back

Transoceanic Oil Corp. M'divani-Wallace No. 1-A, completed a few weeks ago as a 25 bbl. pumper, was deepened from 1705 to 1722 ft. but tested wet and was plugged to the former depth. The well is in a semi-proved portion of the Santa Barbara Mesa field.

Petrol Completing Gato Ridge Well

The Petrol Corp. is completing No. 3-15 on its large Tognazzini lease at Gato Ridge after bottoming at 4695 ft. Casing has been cemented near the 2900 ft. level and a liner run to bottom.

Weather Hampers Ventura Exploration

Hampered by the recent rains, exploration in Ventura county has been proceeding at a slower pace than usual but is by no means at a standstill.

Southeast of Simi, Robert Cannell is drilling a core-hole at 1125 ft. in sec. 17,2-18. Harry Crinklaw is the contractor. In the Filmore area near the mouth of Sespe Creek, Intercounties Fuel Co., employing spudder type of drilling equipment, is making hole below 500 ft. On property of the Piru Fruit Co., D. V. Nelson's Corehole No. 1 in sec. 19,4-19 is coring past the 1100 ft. level.

Among those active in the mountains back of Santa Paula are Sea Port Oil Co.'s Arnett No. 3 which pumps a small amount of oil from 2530 ft., Norwood Oil Co.'s Coronet No. 4 which flows 35 bbls, a day of 30 gravity clean oil from 3250 ft. and Chas. P. Johnson Jr. who is preparing to drill in Timber Canyon.

Only active project at South Mountain is California Securities Oil Co.'s Schiefferle No. 1 which is still plugging and testing in hopes of isolating a commercial oil zone.

In Hopper Canyon, Signal Petroleum Co. of California is making hole below 2250 ft. No reports have been received on formations encountered. Other operators are considering development in this area but it is probable that no new wells will be started until the end of spring.

The Texas Co.'s Shiells No. 140 is the only well drilling in the Shiells Canyon field in contrast to the miniature boom enjoyed during the past ten months. No. 140 is coring below 3900 ft. after setting casing at 3375 ft.

Ventura Fields Remain Active

Drilling activity continues at a consistent rate in the major fields of Ventura county with the huge Avenue pool, as usual, at the top of the list. There, for the past few months, an average of ten strings of tools has been constantly maintained with Shell Oil Co. and Tide Water Associated Oil Co. doing most of the work. Recent completions tend to uphold the field's reputation as one of the world's best; Shell having finished Taylor No. 130 at a 3300 bbl. rate and Lloyd Corp. having brought in No. 6 for better than 1000 bbls. a day.

At Rincon, Chanslor-Canfield Midway

COASTAL COUNTIES WILDCATS

Area	Well	No.	Section	Depth	Status
Santa Barbara County					
Elwood	Bolsa Chica Oil Co., Permit	191–7	24, 4-29	4313	Idle
	The Texas Co., Bishop	A–2	13, 4-29	2378	Drilling
Goleta	Coates Spencer D., Hollister	2–A	3, 4-29	1570	Idle
	Del Mar Oil Co., Rowe	1	11, 4-28		Rigging up
Summerland	Barnato Corp., The, Hyland	1	16, 4-26	3415	Idle
San Luis Obispo County					
Huasna	Tex Harvey Oil Corp., Gilmore Comm.	1	11, 32-14	4518	Pumping
	Tex Harvey Oil Corp., Gilmore Comm.	2	11, 32-14		Rigged up–Idle
Ventura County					
Bardsdale	American Seamless Tube Corp., Basola	1	5, 3-19	3140	Bailing
	Elkins, Reed	1	5, 3-19	902	Idle
	Hopland Oil Co.	1	1, 3-19	985	Idle
	Palma Oil Co., Elkins	1	8, 3-19		Grade
	Westoil Corp.	1	6, 3-19	525	Idle
Conejo	Sulphur Springs Oil Co., Janss	1	33, 2-19	4526	Idle
Ojai	Seaport Oil Corp., Arnett	3	15, 4-21	2532	Pumping
	Norwood Oil Co., Coronet	4	17, 4-21	3250	Pumping
	Per-Col Oil Co., Anlauf	6	21, 4-21	2105	Idle
Oxnard	Bender, E. A., Farrell	1A	5, 1-22	6840	Drilling
	The Texas Co., Montgomery	1	13, 2-22	7298	Drilling
Piru	Nelson, D. V., P.F.C.—C.H.	1	19, 4-18	1105	Drilling
	Oilexco, Inc., Newhall-Lund	2	2, 3-18	570	Idle
	Oilexoc, Inc., Stevens	1	34, 4-18	373	Idle
Sespe	Inter Counties Fuel Co.	1A	22, 4-19	510	Idle
	Riley, Irene Burson	1	18, 4-19	2050	Idle
	Rio Hondo Oil Co., Cosby	1	14, 4-19	1695	Idle
	Signal Petroleum Co., Hadley	7	13, 4-19	2205	Drilling
Simi	Cannell, Robert., Robertson C.H.	1	17, 2-18	1104	Drilling
South Mountain	Bolling Oil Co., Schieferle	1	17, 3-29		Cellar
	Calif. Securities Oil Co., Schieferle	1	17, 3-29	4501	Washing perfs.
	Comstock Pet. Co.	1	17, 3-29	1800	Idle
	South Mountain Oil Co.	1	10, 3-20		Rig
Sulphur Mt.	Madison Oil Co., Delphy	1	24, 2-22	2500	Idle
Timber Canyon	Johnson, Chas. P. Jr.	1	24, 4-21		Location

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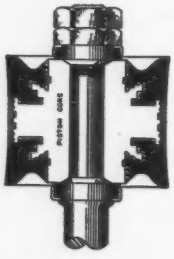

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Oil Co. is drilling two wells and is rigging up for a third, Hobson No. C-9, which is scheduled as a deep test of the central part of the field. C. C. M. O. has locations prepared for three more projects which will be drilled in the near future.

C. C. M. O., General Petroleum Corp. and Continental Oil Co. are working on wells in the San Miguelito-Padre Canyon district.

Oxnard Wells Drill Deep

The two wells seeking new fields in the Oxnard area are now drilling deep enough to be quite interesting. West of the city, E. A. Bender's Farrell No. 1 was last reported at 6850 ft. in shale of Lower Pico age with cores showing dips of 20 to 25 degrees. Both oil and gas have been noted on the ditch at times.

Drilling has been slowed somewhat in The Texas Co.'s Montgomery No. 1 northeast of town by the loss of bit cutters. Bottom is approximately 7300 ft.

Union Completes Santa Maria Well

Union Oil Co. added another good well to its long list of Santa Maria Valley producers when it completed Vincent No. 6 flowing at an initial rate of 1000 bbls. a day. Located in sec. 25,10-34, the hole was bottomed at 4375 ft. and finished with 7 in. casing cemented at 3187 ft.

Union Oil Co.'s southeast outpost, Fleischer No. 1 in sec. 31-10-33, cemented casing after topping the Miocene at 4300 ft. Derricks are up for Morretti No. 3-1 and Stinson No. 2.

Gallonage Figures Near 2 Billion Mark

It's getting so that figures relative to California's gasoline consumption are something like the statistics used to measure the size and distance of the planets.

Anyway, motorists of the State used 1,890,774,847 gallons of motor vehicle fuel during 1940 and at the current rate of increase it appears the two-billion mark soon will be passed as an annual figure, according to R. E. Collins, chairman of the State Board of Equalization.

Board records indicate that a tax of $56,723,245.41 was assessed against the 1940 consumption. This represented a gain of $2,400,323.40 or 4.41 per cent over the 1939 fuel tax total and establishes an all-time record for this source of income to the State.

The motor vehicle fuel distribution for December amounted to 157,735,552 gallons on which a tax of $4,732,066.56 was levied. This amounted to a gain of 3.98 per cent over the same month of the preceding year and was the twentieth consecutive month in which gains had been recorded in gasoline sales.

Oil Discovery In Argentina

A rich new oil strike in Barranca in the province of Mendoza, Argentina, in a previously unexploited area is reported in dispatches from Buenos Aires. The initial well flowed 700 bbls. the first day of pumping from 7,546 feet. Drilling will be accelerated in this region, which is entirely separate from other fields.

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Roger Henquet, executive vice president of International Cementers, Inc.; R. M. Cook, vice president and general manager, and R. J. Ritner, California district manager.

International Cementers, Inc. Announce Personnel Change

R. J. (Bob) Ritner has been made district manager of California for International Cementers, Inc., and J. B. McElheny has been made manager of the Northern Division, succeeding Mr. Ritner, it was announced recently. Other changes include the transfer of Paul Lewis to West Texas to be district manager in that area, and his succession as division manager in the Los Angeles Basin area by M. W. (Monk) Cook.

Paul Lewis, West Texas district manager.

International Cementers, Inc., has recently added three well known cementers to the California personnel. These are Vernon E. Clayton, William E. Gall, and Tom McElheny. The company is also opening operations in Wyoming with three new outfits Feb. 1. Extension of activities to West Texas and the Gulf Coast area will follow shortly thereafter.

R. M. (Bob) Cook, vice president and general manager, is leaving this week for an extended tour of the areas in which International Cementers, Inc. operate. He plans to return to the Pacific Coast about June.

Abegg & Reinhold In Plant Expansion

Involving an expenditure of approximately $50,000, construction was started this month on an addition to the plant of Abegg and Reinhold Co., Ltd., oil field equipment manufacturers, at 2451 East 26th St., Los Angeles.

This building, which will provide increased heat-treating facilities, is to be constructed entirely of steel. The frontage, on 26th Street, will be 160′, and the depth of the building will be 60′. Completion is scheduled for Mar. 1.

Record-breaking advance committments for 1941 would over-tax present production facilities and necessitated the additional space, it was reported by officials of the company.

Recently appointed Pacific Coast Manager for Parkersburg Rig & Reel Co., P. L. Brooks will be in charge of sales in the states of California, Oregon, Washington, Colorado, Wyoming and Montana. Headquarters for the Pacific Coast territory will be maintained at Parkersburg's Los Angeles office at 4001 East Washington Blvd.

Barnsdall Submits High Jail Farm Bid

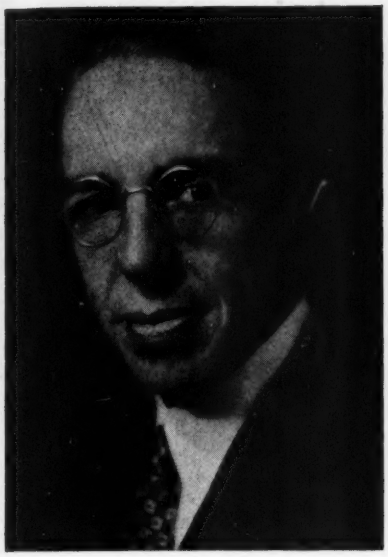
What are probably the highest prices ever offered in California for a strictly wildcat oil lease were bid this week to the Los Angeles County Board of Supervisors for the privilege of drilling the Sheriff's Honor Farm at Castaic Junction.

Bids were submitted by Gilmore Oil Company, The Texas Company and Barnsdall Oil Company.

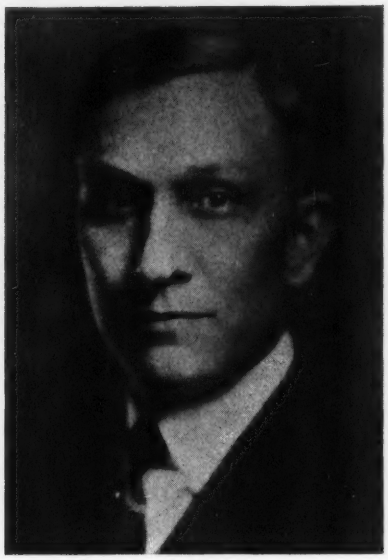
The 2400 acre parcel was divided into 80 acre parcels, alternately designated as "A" and "B" parcels. Barnsdall bid a cash bonus of $50,000 plus $250,000 out of 5% of the oil as bonus for the "A" parcels, with a fixed option price for one year of $500,000 cash as bonus on the "B" parcels. Royalty on both parcels was set at 25%. The bid of the Barnsdall has been recommended for acceptance to the Board by Bob New, Vice President of Continental Corp., who acted as advisor to the county and was responsible for the specifications of the lease.

Charles B. Jahnke Becomes Cooper-Bessemer President

The resignation of B. B. Williams as president of The Cooper-Bessemer Corp., and election of Charles B. Jahnke as his successor, was announced Saturday, Dec. 28, following a meeting of the corporation's board of directors in Mount Ver-



B. B. Williams



C. B. Jahnke

non, Ohio, on the previous Friday afternoon.

Mr. Williams was made chairman of the board of directors, succeeding Dr. E. J. Fithian of Grove City, Penna., who resigned his position. The new chairman expects to continue in an active capacity as the head of the corporation. Mr. Jahnke, who has been vice-president and general manager for the past two and a half years, will act as president and general manager and will serve as a member of the executive committee. Dr. Fithian, one of the founders of the Bessemer Gas Engine Company, and its president for several years, will continue as a member of the board of directors.

Mr. Williams had considered resigning the presidency and nominating Mr. Jahnke his successor at the corporation's annual meeting in March, but decided to act now because of the importance of national defense work being done by Cooper-Bessemer and the necessity of his being absent often from the company's main offices.

The new president has been with The Cooper-Bessemer Corp. since 1935, having served two and a half years as chief engineer and since July 1937, as vice-president and general manager. He came to Cooper-Bessemer as a diesel engineer, with an extensive background and training in engineering work with that type of engine.

Reared at Cincinnati, Mr. Jahnke was graduated from the University of Cincinnati in 1910 and then worked for 21 years with Fairbanks, Morse & Co. at Beloit, Wis., first as chief engineer and later as works manager of the Beloit plant. He later served as director of engineering after the Fairbanks-Morse management was changed to concentrate all activities of the company at Beloit. In 1931 he went to Chicago to join the International Harvester Co. in their program of developing diesel engines for farm machinery. Four years later he became affiliated with Cooper-Beesemer at Mount Vernon.

Mr. Williams, the retiring president, has been with The Cooper-Bessemer Corp. and its predecessor, the C. & G. Cooper Co., for 40 years. In 1900 he joined the Cooper Co. as a sales engineer, and was made secretary in 1912. Four years later he became vice-president and general manager, and in 1920 was elected president, a position he retained when the Cooper Co. was merged with Bessemer in 1929 to form the present corporation.

In becoming chairman of the board, Mr. Williams does not intend to retire into an inactive capacity, but plans to retain an active voice in the company's affairs and especially in shaping its broad policies, while turning over to the new president the actual administrative and organization work, along with the executive powers of the presidency.

Cal. S. O. Subsidiary Proves Canadian Area

Standard Oil Co. of British Columbia, Ltd., a wholly owned subsidiary of Standard Oil Co. of California, has completed its oil well Princess No. 2, located near the town of Princess, Province of Alberta, on Canadian Pacific Railway lands about 125 miles east of Calgary, and about the same distance east of the Turner Valley Field, in the Great Plains region of Alberta.

This well came in producing at the rate of 500 barrels of oil per day from a depth of 3260 feet, and 13,000,000 cubic feet of gas under high pressure. The oil is 26 degrees gravity and contains a good quality and percentage volume of gasoline. The gasoline is high octane for straight run, being about 65.

The well is located on a large structure 20 miles long on which the company holds in excess of 50,000 acres. The well, of course, proves up only a small part of this acreage but there are probably several thousand acres of possible oil land. It is the first commercial oil produced in the Great Plains region, and the nearest oil in Western Canada to the larger markets.

Because of the shortage of oil in Canada due to the war, a ready market is anticipated.

J. N. Kint Joins Pittsburgh Equitable Meter

The appointment of J. N. Kint, to the sales force of the Pittsburgh Equitable Meter Co. and Merco Nordstrom Valve Co. has been announced by H. Boezinger, district manager.

To assist in the expanding activities of this concern, Mr. Kint will take over the sale of meters, valves, and other products manufactured by Pittsburgh Equitable Meter Co. and Merco Nordstrom Valve Co. to municipalities, water companies, and Federal and State projects within their Southern California territory.

For several years past, Mr. Kint has jointly represented Worthington Pump & Machinery Co. and several other manufacturers of mechanical equipment in the Los Angeles area. For ten years, Mr. Kint was associated with the Wrigley Co. in the development of Catalina Island. Prior to that time he was, for four years, assistant business manager of the City of Long Beach. Mr. Kint at one time was chief assistant to the late Charles H. Windahm, at that time general manager in charge of engineering and construction of the breakwater and harbor facilities at Hollywood, Florida.

Mr. Kint's new affiliation will be of interest to his host of friends in Southern California.

M. E. Montrose Elected Lane-Wells Vice-President

M. E. Montrose, general sales manager of Lane-Wells Co. for the past eighteen months, has been elected a vice-president of the company, according to an announcement made by Walter T. Wells, chairman of the board. As vice-president Mr. Montrose will continue to direct the company's commercial sales activities.

M. E. Montrose

Prior to joining the Lane-Wells organization in 1935, Mr. Montrose was connected with the General Electric Co. for fourteen years, and followed the petroleum industry in Texas and Louisiana where he was also manager of the General Electric Co. Shreveport office. As Lane-Wells first Mid-Continent division manager, he organized the company's activities in the Mid-Continent, Rocky Mountain and Eastern fields. Following this, he moved to Houston as the company's Gulf Coast division manager, the position he held until May 1939 when he was transferred to Los Angeles and made general sales manager. He was elected a director of the company in 1938.

R. C. Stoner Elected S. O. Vice President

R. C. Stoner has been elected a vice-president of the Standard Oil Co., of California, filling the vacancy created by the retirement of M. E. Lombardi.

Mr. Stoner was graduated from the University of California in 1912 and joined the Standard Oil Co. in 1913. His first work was in the geological division of the producing department. He later served as petroleum engineer in San Joaquin Valley and the Rocky Mountain area. Thereafter he was for three years manager of geological and exploration activities in Mexico. In 1925 he became assistant general manager of the producing department and was made general manager in 1931. He was elected to the board on Jan. 7, 1938.

Wildcat Committee Elects 1941 Officers

The Wildcat Committee of the California Oil and Gas Association has announced the election of W. Dale Russell, Republic Supply Company of California, as chairman for the year 1941. Other officers elected are Charles D. Wagner, Wagner-Morehouse, Inc., vice-chairman; L. L. Aubert, Bankline Oil Co., treasurer; and D. S. Kilgour, California Oil and Gas Assn., secretary.

W. D. Russell

The Wildcat Committee has just completed a highly successful year, culminated by the staging of the Christmas banquet and Jinks, highlight of which was the play which is written and produced each year for this function by the wildcats themselves.

E. B. Fowks Heads L. A. Nomads in 1941

New officers for the year 1941 were elected at the annual business meeting of the Los Angeles Chapter of Nomads held in Los Angeles on Wednesday evening, January 15th. The officers selected for the year were: E. B. (Ernie) Fowks, Emsco Derrick & Equipment Co., president; W. F. (Bill) Bettis, M. O. Johnston Oil Field Service Corp., vice-president; Earl M. Rees, Oil Well Mfg. Co., sect.-treas.; Elmer R. Smith, Lane-Wells Co., asst. sect.-treas.; R. J. (Bob) Eiche, sgt.-at-arms; and Roy Hitchcock, H & B Sales Co., deputy sgt.-at-arms.

Following the usual dinner W. D. Fraser, general chairman of the Southern California Inter-American Conference, spoke of the activities of that organization and invited the Nomads to visit the meetings to be held during the following day. Nomad R. P. (Dick) Smith, National Supply Co., then gave an interesting talk on conditions in England and Rumania during the past decade from information gained on numerous visits to those countries during the years prior to the present war.

Introduced by President Ted Sutter, was Louis Chappuis who recently returned from Peru and Brazil where he has been conducting geological exploratory work for some American interests. Mr. Chappuis was born in Peru where his father is a professor at the oldest university in South America and his brother a high official in Lima. He is a graduate of University of California and has done extensive geological work in California. Among the other guests from foreign fields were: C. H. Fewell of Burmah Oil Co.; David Dimmit of International Petroleum from Peru; J. C. Devine of Petroleum Concessions, Qatar-Oman; J. J. Cardynaals of B.P.M.; P. M. Bowen, formerly with the C.P.C. in Maracaibo, Venezuela; C. R. McGee of Solupema Petroleum Ltd. operating south of Bahia, Brazil; and C. H. Goff of U.B.O.T. from Trinidad.

Arrangements for the Second Annual Inaugural Ball of the Los Angeles Chapter of Nomads have been announced. This big social event of the Nomads will be held at the Wilshire Country Club in Los Angeles on Valentine's Day, February 14, 1941. The Committee in charge of the Inaugural Ball consists of Bob Eiche, chairman; Bill Bettis of M. O. Johnston Oil Field Service Co.; Elmer Smith of Lane-Wells Co.; Jack Walton; George Trembley of Howard Supply Co.; Fred Ripley of Emsco Derrick & Equipment Co.; Elmer Decker of Martin-Decker Corp.; Larry Coker of National Supply Co.; and Frosty Martin of Martin-Decker Corp.

Slips For Handling Streamlined Drill Collars

Special slips which conform automatically to the O.D. of the drill collar and grip it securely even though it is worn considerably smaller than its original diameter, are being marketed by Baash-Ross Tool Co., 5512 Boyle Ave., Los Angeles, Calif.

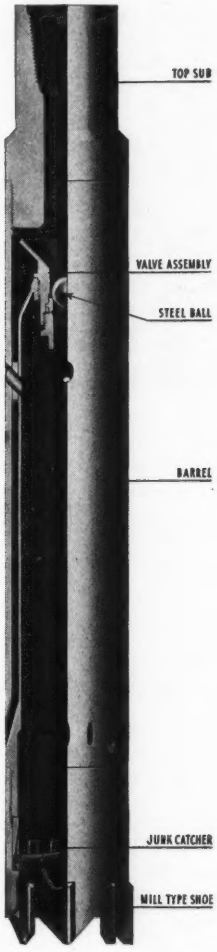
(Above) Baash-Ross "C-S Long" Type Drill Collar Slips. (Below) Baash-Ross "C-S Regular" Type Drill Collar Slips.

Baash-Ross Drill Collar Slips are especially intended for use with streamlined drill collars which do not have a slip recess or stop shoulder. They are made up of multiple narrow segments flexibly hinged together. This construction permits the horizontal and vertical adjustments necessary to enable the liners to grip varying diameters effectively to be made automatically as the slips are seated in the tapered bore of the master bushings. When holding a new drill collar, the slips are seated in the upper portion of the tapered bore. As the diameter of the drill collar is decreased through wear the slips seat lower in the taper, the segments drawing together to conform to the reduced diameter of the drill collar. The range between maximum and minimum dimensions that can be effectively held by Baash-Ross Drill Collar slips of each size is 1½ in. on the diameter.

Drill collars slips are made in two types. The "C-S Long" type has integral extensions above the liners and is used in combination with the Baash-Ross Safety Clamp, a flexible slip-grip collar applied around streamlined drill collars, and flush pipe or liners, to supply stop shoulder for extra safety. The "C-S Regular" type is shorter and used independently. Both types have the same liner area in contact with the drill collar, and employ renewable heat treated alloy steel liners. Loop-type safety handles are pivoted so that they lie flat upon the rotary when not in use.

Bowen Announces Design Changes in Junk Basket

Changes in design and construction of the Bowen Junk Basket to increase its efficiency on fishing jobs have been announced by S. R. Bowen Co., Santa Fe Springs, Calif.



The Basket is now made with junk catchers that will retrieve all popular sizes and types of rock bit cones within the hole size ranges of the tool. The closely-spaced dogs have been retained, however, so that small steel objects such as bolts, etc., can also be held by the basket. This feature helps increase the usefulness of the tool by enabling the operator to recover a variety of different sized objects.

Another new feature contributing to the efficiency of the tool is found in the valve assembly. It has been made larger, stronger, and simpler, and is easier to replace if damaged. When closed by the operator, this valve diverts the mud fluid at high pressure through inner passages in the barrel, out against the wall of the hole and up through the bottom of the tool to return ports. This reverse circulation action washes all junk toward the center of the hole where it is more easily picked up on top of the short core which the tool cuts. An important and exclusive feature of Bowen Junk Basket is that full pump pressure can be utilized for washing the junk into the basket. Also, on coming out of the hole, the fluid passages in the walls of the tool permit circulation without danger of losing the fish held in the basket, preventing wet jobs.

Construction features of the Bowen Junk Basket include a heavy forged alloy steel barrel and exceptionally rugged parts to withstand severest use. The tool is made in all popular sizes and is widely used for hole-straightening and core recovery operations as well as for fishing. For additional information, write direct to S. R. Bowen Co., Santa Fe Springs, Calif.

Howard Supply Co. Announces Promotions

The Howard Supply Co., distributors of Republic tubular products and general oil well supplies, has appointed Earl Covel, formerly district manager, to manager of tubular sales. David S. Bradbury, formerly Long Beach manager, has been appointed district manager, both appointments became effective January 1st, according to an announcement by the company.

Lane-Wells Officials In Annual Sales Meet

Plans for an aggressive sales campaign in 1941 were made when the officials of all Lane-Wells Co. Divisions met in Los Angeles January 13-17 for their annual sales convention according to Rodney S. Durkee, president.

Convention activities were directed by M. E. Montrose, vice-president and general sales manager. Lane-Wells Gulf Coast Division was represented by Morton T. Higgs, division manager and J. E. Huff, Jr., in charge of division sales. R. B. McCullar, division manager and Chas. T. Casebeer, division sales manager represented the Mid-Continent Division. California representatives were J. W. McPhee, division manager and D. M. Anderson, division sales manager. J. Murray Walker attended from Okotoks, Alberta, Canada.

Motor service engines are X-raying sediment to determine source of carburetor clogging.

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Oil Men's Calendar

Calif. Natural Gasoline Association. **Los Angeles Chapter**—Meets 1st Thursday Each Month, Barker Bros. Bldg., Los Angeles—Dinner at 6:00 (Optional). **Taft Chapter**—Meets Third Thursday Each Month.

American Society of Mechanical Engineers—Los Angeles Section—Meets 2nd Thursday Each Month—Barker Bros. Bldg., Los Angeles. Dinner at 6:30 (Optional).

February

17-20—American Institute of Mining & Metallurgical Engineers, Engineering Societies Building and Commodore Hotel, New York.

19-21—Association of Highway Officials of North Atlantic States, Hotel Statler, Boston, Mass.

24-25—Liquefied Petroleum Gas Assn. Inc., annual convention, Chicago, Ill.

26-28—Iowa Independent Oil Jobbers Assn., Des Moines, Iowa.

27-28—American Petroleum Institute, Division of Production, Southwestern District, Washington - Youree Hotel, Shreveport, La.

March

3-7—American Society for Testing Materials, Hotel Mayflower, Washington, D. C.

11—American Petroleum Institute, Division of Production, spring meeting, Pacific Coast District, Biltmore Hotel, Los Angeles, Calif.

17-22—Oil Burner Institute's National Oil Burner Progress Exhibition, Commercial Museum, Philadelphia, Pa.

25—Oil Trades Assn. of New York, annual meeting, Waldorf-Astoria Hotel, New York.

April

2-4—American Assn. of Petroleum Geologists, 26th annual meeting, Rice Hotel, Houston, Texas.

7-11—American Chemical Society, St. Louis, Mo.

17-18—American Petroleum Institute, Division of Production, Wm. Penn Hotel, Pittsburgh, Pa.

23-25 — Petroleum Industry Electrical Assn., Mayo Hotel, Tulsa, Okla.

23-25—Natural Gasoline Assn. of America, annual convention, Baker Hotel, Dallas.

24-25—National Petroleum Assn., Cleveland Hotel, Cleveland, Ohio.

May

5-8—American Gas Assn., Natural Gas Section, Dallas, Texas.

19-23—American Petroleum Institute, 11th mid-year meeting, Mayo Hotel, Tulsa, Okla.

June

23-27—American Society for Testing Materials, 44th annual meeting, Palmer House, Chicago, Ill.

November

3-7—American Petroleum Institute, 22nd annual meeting, San Francisco, Calif.

California Third in Service Stations

Texas has more service stations than any other state, 15,738, against 15,652 for New York, the second ranking state, and California is third with 15,218, according to a complete preliminary tabulation of the 1939 Census of Distribution, just made public. Other states with more than 10,000 stations each are Pennsylvania, 14,031; Ohio, 12,800; Illinois, 12,096; and Michigan, 10,941.

Although the total number of service stations in the United States in 1939 increased to 241,856, double the 1929 count of 121,513, actually there was no such tremendous increase in the total number of outlets for motor fuel. Service stations, by census definition, include only those retail businesses in which the sale of gasoline and oil amounts to 50 per cent or more of total dollar sales. Garages, accessory dealers, country stores, and many other types of outlets sell gasoline and oil as a secondary line, but are not counted as service stations.

In 1929 these secondary outlets totaled 195,719, a total much greater than the 121,513 strictly service stations. During the decade between 1929 and 1939, it is believed, large numbers of these secondary outlets have lost so much of their original business or have gained enough motor fuel business, that they now are classed as service stations. This, of course swells the number of service stations, even though no new outlets are involved; 1939 data on these secondary outlets, to confirm this belief, will not be available until late in 1941.